

Name : **Dr. B. Narayana**
Designation : **Professor, Department of Chemistry &
Registrar (Evaluation), Mangalore University**



Address :
Mangalore University
Mangalagangotri - 574 199, Karnataka, INDIA
Phone: +91-(0)824-22872327(O), +91-9448408909 (M)
Fax : +91-(0)824-2287367(O)
E.mail : nbadiadka@yahoo.co.uk or nbadiadka@gmail.com

I. Teaching Experience

1. Lecturer in Chemistry Mangalore University September 1985 onwards
(Temporary)
2. Lecturer in Chemistry Mangalore University June 1988 onwards
3. Senior Lecturer Mangalore University June 1993 onwards
4. Reader Mangalore University June 1998 onwards
5. Professor Mangalore University June 2006 onwards

II. Citations, Awards and Administrative Experiences

1. Member of Syndicate, Academic Council and Finance Committee of Mangalore University
2. Registrar (Evaluation), Mangalore University – From August 27, 2012 onwards.
3. Chairman, Department of Chemistry-January 2012 to August 2012.
4. One time Basic Science Research Grant of Rs.7.0 lakhs from UGC, 2011-12.
5. Secretary, International Conference on Recent Advances in Industrial Electrochemical Science and Technology, ICRAIEST-2009.
6. Coordinator, M.Sc. Course in Industrial Chemistry-June 2009 to June 2012.
7. Secretary, International Conference on Frontiers in Chemical Research, ICFCR-2008.

8. UGC Expert Committee member for the evaluation of Conference and Project Proposals.
9. Member of Board of Appointments at Pondicherry, Manonmaniam Sundaranar and Kuvempu Universities.
10. Name is cited in Marquis Who's Who - in the World, Vol. No. 14, 15 and 16.
11. Name is cited in the 26th ed. of Dictionary of International Biography(U.K.)
12. Name is cited in Asia/Pacific - "Who's Who" Vol. No.1, 152, 1997.
13. Name is cited in Reference Asia, Vol. 9, 1995, p.368.
14. Name is cited in Indo-Arab Who's Who. Vol. 1 1995.
15. Name is cited in LEARNED ASIA - Educationists Who's Who Vol. No. 2, 1996.
16. Name is cited in Indo-American 'Who's who' Vol.No.1, 1994.
17. Member of the New York Academy of Sciences, New York, USA.
18. Member of the Sectional Committee of the Section of Material Science for 1991-92 (79th session of the ISCA).
19. Life Member of the Indian Science Congress Association.
20. Life Member of IANCAS, BARC, Bombay.
21. Life Member of the Indian Council of Chemists.
22. Life Member of the Indian Chemical Society.
23. Warden University Hostel for Men - Oct. 1990 to Dec. 1995.
24. Mangalore University Post-Graduate Research Fellow (1984- 88).
25. Secured **Third Rank** in M.Sc. (**Calicut University**).
26. Fr. Gabriel **Gold Medal** for securing highest mark in M.Sc. (Final) Chemistry.
27. Prof. A.C. Joseph Scholarship for securing highest marks in M.Sc. (Prev.) Chemistry.
28. Won second prize in Kannada story writing in the University Arts Festival (**Calicut Univ.**).

III. Ongoing Research Projects

S. No.	Funding Agency	Title of the Project	Amount	Year	
				From-	To
01.	BRNS	Standardization of methods for long term continuous sampling of air for 3H measurement and for the measurement	Rs. 1.65 Crore	2014-	17

of OBT and TFWT in environmental matrices

IV. Research Project Completed

S. No.	Funding Agency	Title of the Project	Amount	Year
				From- To
01.	BRNS-MAC	Studies on radio protective efficacy of pyrazole and pyrimidine derivatives using <i>Drosophila</i> model system.	Rs. 14.0 L	2011-14
02.	BRNS	Baseline database on radiation level, radionuclides and stable elements concentration in environmental matrices around Gugi.	Rs. 36.15 L	2010-13
03.	BRNS-MAC	<i>In vivo</i> Studies on Comparative and Synergetic Radiprotective Effect of 4-Amino-5-mercapto-3-substituted-1,2,4-triazole derivatives and <i>Nardostachys Jatmansi</i> Extract.	Rs. 14.7 L	2009-12
04.	NPCIL- KAIGA	Physicochemical Characteristics of Water in Kaiga Area	Rs. 10.37 L	2008-11
05.	BRNS-MAC	<i>In vitro</i> studies on radioprotective effect of chalcone and its derivatives from synthetic and natural origin in bacteria	Rs. 11.82 L	2008-11
06.	DST	The Impact of Natural Process and Anthropogenic Activities on the Atmospheric Chemistry of Dakshina Kannada on the Qualities of Natural Waters	Rs. 14.30 L	2000-03 3 years and 8 months

V. List of Publications

A. International Journals

1. S. John, A. Joseph, A. J. Jose, **B. Narayana**, Enhancement of corrosion protection of mild steel by chitosan/ZnO nanoparticle composite membranes, *Prog. Org. Coat.* (2015), 84, 28-34.
2. P. Sharma, K. N. Subbulakshmi, **B. Narayana**, K. Byrappa, R. Kant, Crystal structure of 2-methyl-4-[(thiophen-2-yl)methylidene]-1,3-oxazol- 5(4H)-one, *Acta Cryst.* (2015), **E71**, o123-o124.
3. C. Y. Panicker, H. T. Varghese, **B. Narayana**, K. Divya, B. K. Sarojini, J. A. War, C. V. Alsenoy, H. K. Fun FT-IR, NBO, HOMO-LUMO, MEP analysis and molecular docking study of Methyl *N*-([2-(2-methoxyacetamido)-4-(phenylsulfanyl)phenyl] amino){[(methoxycarbonyl) imino]methyl}carbamate, *Spectrochim. Acta A* (2015), (In Press).
4. C. Y. Panicker, H.T. Varghese, P. S. Nayak, **B. Narayana**, B. K. Sarojini, H. K. Fun, J. A. War, S. K. Srivastava, C. V. Alsenoy Infrared spectrum, NBO, HOMO-LUMO, MEP and molecular docking studies (2*E*)-3-(3-Nitrophenyl)-1-[4-piperidin-1-yl]prop-2-en-1-one, *Spectrochim. Acta A* (2015), (In Press).
5. Y. S. Mary, C. Y. Panicker, M. Sapnakumari, **B. Narayana**, B.K. Sarojini, Abdulaziz A. Al-Saadi, C. V. Alsenoy, J. A. War, Molecular structure, FT-IR, vibrational assignments, HOMO–LUMO, MEP, NBO analysis and molecular docking study of ethyl-6-(4-chlorophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Spectrochim Acta A* (2015), **138**, 73-84.
6. Y. S. Mary, C. Y. Panicker, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, A. Abdulaziz Al-Saadi, C. V. Alsenoy, J. A. War, Infrared spectrum, structural and optical properties and molecular docking study of 3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazole-1-carbaldehyde, *Spectrochim Acta A* (2015), **138**, 529-538. doi: <http://dx.doi.org/10.1016/j.saa.2014.11.041>.
7. Y. Sheena Mary, C. Yohannan Panicker, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, A. Abdulaziz, Al-Saadi, Christian Van Alsenoy, J. A. War, FT-IR, NBO, HOMO-LUMO, MEP analysis and molecular docking study of 1-[3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Spectrochim Acta A* (2015), **136**, 483-493.
8. S. Pandey, A. Dwivedi, A. K. Srivastava, N. Misra, B. K. Sarojini, Billava J. Mohan, **B. Narayana**, Structural, electronic, optical and vibrational properties of 1-(5-chloro-6-fluoro-1,3-benzothiazol-2-yl)hydrazine & 1-(6-chloro-1,3-benzothiazol-2-yl)hydrazine-A quantum chemical study, *Der Pharma Chemica* (2014), **6**, 70-79.

9. Y. Sheena Mary, C. Yohannan Panicker, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, A. Abdulaziz, Al-Saadi, Christian Van Alsenoy, J. A War, H. K. Fun, Molecular structure, FT-IR, Vibrational assignments, HOMO-LUMO analysis and molecular docking study of 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1H-pyrazol-1-yl]ethanone, *Spectrochim Acta A* (2015), **136**, 473-482.
10. J. Lukose, C. Y. Panicker, P. S. Nayak, **B. Narayana**, B. K. Sarojini, C. V. Alsenoy, A. A. Al-Saadi, Synthesis, structural and vibrational investigation on 2-Phenyl-*N*-(pyrazin-2-yl)acetamide combining XRD diffraction, FT-IR and NMR spectroscopies with DFT calculations, *Spectrochim Acta A* (2015), **135**, 608-616.
11. K. G. Vipin Das, C. Y. Panicker, **B. Narayana**, P. S. Nayak, B.K. Sarojini, A. A. Al-Saadi, FT-IR, molecular structure, first order hyperpolarizability, NBO analysis, HOMO and LUMO and MEP analysis of 1-(10*H*-Phenothiazin-2-yl)ethanone by HF and density functional methods, *Spectrochim Acta A* (2015), **135**, 162-171.
12. Y. S. Mary, C. Y. Panicker, P.L. Anto, M. Sapnakumari, **B. Narayana**, B.K. Sarojini Molecular structure, FT-IR, NBO, HOMO and LUMO, MEP and first order hyperpolarizability of (2*E*)-1-(2,4-Dichlorophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one by HF and density functional methods, *Spectrochim Acta A* (2015), **135**, 81-92.
13. R. Raju, C. Yohannan Panicker, P. S. Nayak, **B. Narayana**, B. K. Sarojini, C. Van Alsenoy, A. Abdulaziz, Al-Saadi, FT-IR, molecular structure, first order hyperpolarizability, MEP, HOMO and LUMO analysis and NBO analysis of 4-[(3-acetylphenyl)amino]-2-methylidene-4-oxobutanoic acid, *Spectrochim Acta A* (2015), **134**, 63-72.
14. A. S. Praveen, H. S. Yathirajan, M. Kaur, **B. Narayana**, E. C. Hosten, R. Betz, C. Glidewell, Different patterns of supramolecular assembly in constitutionally similar 6-arylimidazo[2,1-*b*][1,3,4]thiadiazoles, *Acta Cryst.* (2014), **C70**, 920-926.
15. P. S. Nayak, **B. Narayana**, H. S. Yathirajan, E. C. Hosten, R. Betz, C. Glidewell, (2*E*)-3-(6-methoxynaphthalen-2-yl)-1-(pyridin-3-yl)prop-2-en-1-one and its cyclocondensation product with guanidine, (4*RS*)-2-amino-4-(6-methoxynaphthalen-2-yl)-6-(pyridin-3-yl)-3,4-dihydropyrimidine monohydrate: two types of hydrogen-bonded sheet, *Acta Cryst.* (2014), **C70**, 1011-1016, doi: 10.1107/S2053229614021524.

16. S. Samshuddin, J. P. Jasinski, R. J. Butcher, E. A. Neuhardt, **B. Narayana**, H. S. Yathirajan, C. Glidewell, Three closely-related cyclohexanols (C₃₅H₂₇X₂N₃O₃; X = F, Cl or Br): similar molecular structures but different crystal structure, *Acta Cryst.* (2014), **C70**, 953-959.
17. P. S. Nayak, J. P. Jasinski, J. A. Golen, **B. Narayana**, M. Kaur, H. S. Yathirajan, C. Glidewell, Halogenated C,N-diarylacetylides: molecular conformations and supramolecular assembly, *Acta Cryst.* (2014), **C70**, 889–894
18. S. Samshuddin, J. P. Jasinski, J. A. Golen, **B. Narayana**, H. S. Yathirajan, C. Glidewell, Hydrogen-bonded chains in 3,5-bis(4-fluorophenyl)-1-phenyl-1H-pyrazole and complex hydrogen-bonded sheets in (5RS, 6SR)-6-(4-fluorobenzoyl)-5-(4-fluorophenyl)-2-(4-hydroxyphenyl)-5,6-dihydro-4H-1,3,4-oxadiazine *N,N*-dimethylformamide monosolvate, *Acta Cryst.* (2014), **C70**, 867–871.
19. A. Najiya, C. Yohannan Panicker, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, C. Van Alsenoy, Molecular structure, FT-IR, first order hyperpolarizability, NBO analysis, HOMO and LUMO, MEP analysis of (*E*)-3-(4-chlorophenyl)-1-(4-fluorophenyl)prop-2-en-1-one by HF and density functional methods, *Spectrochim Acta A* (2014), **133**, 526-533.
20. Kamni, B. K. Sarojini, P. S. Manjula, **B. Narayana**, Sumati Anthal, R. Kant, Crystal structure of 4-[(*E*)-(4-chlorobenzylidene)amino]-3-(2-methylbenzyl)-1*H*-1,2,4-triazole-5(4*H*)-thione, *Acta Cryst.* (2014), **E70**, o1015–o1016.
21. **B. Narayana**, V. V. Salian, B. K. Sarojini and J. P. Jasinski, (*2E*)-1-(4-Chlorophenyl)-3-[4-(propan-2-yl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2014), **E70**, o855.
22. Y. Sheena Mary, C. Yohannan Panicker, **B. Narayana**, S. Samshuddin, B. K. Sarojini, C. Van Alsenoy, FT-IR, molecular structure, HOMO-LUMO, MEP, NBO analysis and first order hyperpolarizability of Methyl 4,4''-difluoro-5'-methoxy-1,1':3',1''-terphenyl-4'-carboxylate, *Spectrochim Acta A* (2014), **133**, 480-488.
23. **B. Narayana**, V. V. Salian, B. K. Sarojini and J. P. Jasinski, 1-{3-(4-Chlorophenyl)-5-[4-(propan-2-yl)phenyl]-4,5-dihydro-1*H*-pyrazol-1-yl}propan-1-one, *Acta Cryst.* (2014), **E70**, o763-o764.
24. **B. Narayana**, P. S. Nayak, B. K. Sarojini and J. P. Jasinski, 4-[(4-Acetylphenyl)amino]-2-methylidene-4-oxobutanoic acid, *Acta Cryst.* (2014), **E70**, o752-o753.

25. **B. Narayana**, P. S. Nayak, B. K. Sarojini and J. P. Jasinski, 4-[(4-Bromophenyl)amino]-2-methylidene-4-oxobutanoic acid, *Acta Cryst.* (2014), **E70**, o779-o780.
26. **B. Narayana**, V. V. Salian, B. K. Sarojini and J. P. Jasinski, 1-{3-(4-Chlorophenyl)-5-[4-(propan-2-yl)phenyl]-4,5-dihydro-1*H*-pyrazol-1-yl}butan-1-one, *Acta Cryst.* (2014), **E70**, o761-o762.
27. **B. Narayana**, V. V. Salian, B. K. Sarojini and J. P. Jasinski, 1-{3-(4-Chlorophenyl)-5-[4-(propan-2-yl)phenyl]-4,5-dihydro-1*H*-pyrazol-1-yl}ethanone, *Acta Cryst.* (2014), **E70**, o781.
28. **B. Narayana**, P. S. Nayak, B. K. Sarojini, J. P. Jasinski, 2-(2-Methylphenyl)-*N*-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2014), **E70**, o716.
29. B. K. Sarojini, P. S. Manjula, **B. Narayana**, J. P. Jasinski, 4-[(*E*)-(4-Hydroxybenzylidene)amino]-3-methyl-1*H*-1,2,4-triazole-5(4*H*)-thione, *Acta Cryst.* (2014), **E70**, o733-o734.
30. **B. Narayana**, M. Sapnakumari, B. K. Sarojini, J. P. Jasinski, 3-(4-Fluorobenzoyl)-4-(4-fluorophenyl)-4-hydroxy-2,6-diphenylcyclohexane-1,1-dicarbonitrile, *Acta Cryst.* (2014), **E70**, o736-o737.
31. A. K. Srivastava, A. K. Pandey, S. Pandey, P. S. Nayak, **B. Narayana**, B. K. Sarojini, N. Mishra, Uniform versus non-uniform scaling of normal modes predicted by ab initio calculations, A test on 2-(2,6-Dichlorophenyl)-*N*-(1,3-thiazol-2yl)acetamide, *Int. J. Spectrosc.* (2014).
32. M. Kaur, J. P. Jasinski, H. S. Yathirajan, **B. Narayana** and K. Byrappa, *N*-(1,5-Dimethyl-3-oxo-2-phenyl-2,3-dihydro-1*H*-pyrazol-4-yl)-2-(4-nitrophenyl)acetamide, *Acta Cryst.* (2014), **E70**, o636-o637.
33. M. Sapnakumari, **B. Narayana**, P. M. Gurubasavarajswamy, B. K. Sarojini, Design synthesis and pharmacological evaluation of new 3 pyrazoline derivatives, *Monatsh Chem.* (2014), DOI 10.1007/s00706-014-1371-x(in Press)
34. N. B. S. Ismail, **B. Narayana**, V. V. Salian, Propiverine: new visible spectrophotometric method for the determination in pure and dosage form, *J. Single Mol. Res.* (2014), 2, 74-79.
35. P. S. Nayak, **B. Narayana**, B. K. Sarojini, Sana Sheik, K. S. Shashidhara, K. R.

Chandrashekar, Design, synthesis, molecular docking and biological evaluation of imides, pyridazines derived from itaconic anhydride for potential antioxidant and antimicrobial activities, *J. Taibah Univ. Sci.*(2014), (Elsevier) (Accepted, article no. JTUSCI103).

36. N.B.S. Ismail, **B. Narayana**, K. Divya, Validated spectrophotometric methods for the determination of bifonazole in pharmaceuticals by charge transfer complexation, *Journal of the Association of Arab Universities for Basic and Applied Sciences* (2014) (Article in Press)
37. P. S. Nayak, **B. Narayana**, B. K. Sarojini, J. Fernandes, Akshatha, Design, Synthesis and Biological Evaluation of 2-(4-Phenylpiperazin-1-yl)-N-(pyrazin-2-yl)acetamide as DPPH Scavenging, Analgesic and Anti-inflammatory Agent, *J. Single Mol. Res.* (2014), **2**, 20-26.
38. K. Divya, **B. Narayana**, A Novel Spectrophotometric Approach for the Determination of Febantel in Pure and Dosage Form, *Journal of the Association of Arab Universities for Basic and Applied Sciences* (Accepted, Ref. No.: JAAUBAS-D-13-00104R4).
39. K. Divya, **B. Narayana**, Novel reagents for the spectrophotometric determination of isoniazid in pure and pharmaceutical formulations, *Iranian journal of analytical chemistry* (Accepted Ref. No.: 1013-IJAC).
40. K. Divya, **B. Narayana**, Metformin HCl: Visible spectrophotometric determination in pure and dosage form, *J. Single Mol. Res.* (2014), **2**, 14-19.
41. P. S. Nayak, **B. Narayana**, B. K. Sarojini, K. Hegde, K. S. Shashidhara, Design and synthesis of novel heterocyclic acetamide derivatives for potential analgesic, anti-inflammatory and antimicrobial activities, *Med. Chem. Res.* (2014), **23**, 4280-4294.
42. M. Sapnakumari, **B. Narayana**, B. K. Sarojini, Synthesis of new indazole derivatives as potential antioxidant agents, *Med. Chem. Res.* (2014), **23**, 2368-2376.
43. A. S. Praveen, H. S. Yathirajan, **B. Narayana**, B. K. Sarojini, Synthesis, characterization and antimicrobial studies of a few novel thiazole derivatives, *Med. Chem. Res.* (2014), **23**, 259-268, DOI 10.1007/s00044-013-0629-x.
44. P. S. Nayak, **B. Narayana**, B. K. Sarojini, Synthesis, characterization and *in vitro* biological evaluation of 4-[(1,5-dimethyl-3-oxo-2-phenyl-2,3-dihydro-1H-pyrazol-4-yl)amino]-2-methylidene-4-oxobutanoic acid, *Indo Am. J. Pharm. Res.* (2014), **4**, 1881-1888.

45. K. Divya, **B. Narayana**, New visible spectrophotometric methods for the determination of atenolol in pure and dosage forms *via* complex formation, *Indo Am. J. Pharm. Res.*(2014), 4, 194-203.
46. K. Divya, **B. Narayana**, Novel spectrophotometric methods for the determination of selegiline hydrochloride in bulk and its pharmaceutical preparation, *ISRN spectroscopy*. (2014), 1-6.
47. K. Divya, **B. Narayana**, Novel spectrophotometric methods for the determination of selegiline hydrochloride in bulk and its pharmaceutical preparation, *ISRN spectroscopy*. (2014), 1-6.
48. A. S. Praveen, H. S. Yathirajan, **B. Narayana**, B. K. Sarojini, Synthesis and spectroscopic characterization of some novel Schiff bases of benzylidene derivatives, *Der Pharma Chemica* (2014), 6, 1-6.
49. S. Anthal, B. Nasrin, **B. Narayana**, B. K. Sarojini, V. K. Gupta, R. Kant, Synthesis and crystal structure of 4-(diphenylmethyl)-1-methylpiperazin-1-ium picrate, *Eur. Chem. Bull.* (2014), 3, 251-253.
50. A. K. Srivastava, **B. Narayana**, B. K. Sarojini and N. Misra, Vibrational, structural and hydrogen bonding analysis of *N'*-[(*E*)-4-hydroxybenzylidene]-2-(naphthalen-2-yloxy) acetohydrazide: combined density functional and atoms-in-molecule based theoretical studies, *Indian J. Phys.*(2014), 88, 547–556.
51. P. Sharma, S. Samshuddin, **B. Narayana**, R. Kant, Structure of *N*-hydroxy-4-phenylbut-3-en-2-imine, *Eur. Chem. Bull.* (2014), 3, 482-484.
52. L. Kamath, K. B. Manjunath, S. Shettigar, G. Umesh, **B. Narayana**, S. Samshuddin, B. K. Sarojini, Investigation of third-order nonlinear and optical power limiting properties of terphenyl derivatives, *Opt. Laser Technol.* (2014), 56, 425-429.
53. R. Sharma, P. S. Nayak, **B. Narayana**, V. K. Gupta, R. Kant, Synthesis and x-ray structure of 2-hydrazinyl-1,3-benzothiazole, *Eur. Chem. Bull.* (2014), 3, 337-339.
54. A. K. Srivastava, A. K. Pandey, **B. Narayana**, B. K. Sarojini, P. S. Nayak, N. Misra, Normal modes, Molecular Orbitals and Thermochemical analyses of 2, 4 and 3, 4 dichloro substituted phenyl-*N*-(1, 3-thiazol-2-yl)acetamides: DFT Study and FTIR spectra, *J. Theo. Chem.* (2014), 2014, 10 (<http://dx.doi.org/10.1155/2014/125841>)

55. R. Sharma, S. Samshuddin, **B. Narayana**, B. K. Sarojini, V. K. Gupta, R. Kant , Structural Analysis of (2e)-3-[4-(1h-benzimidazol-2-ylmethoxy)phenyl]-1-(4-chloro phenyl)prop-2-en-1-one, *Eur. Chem. Bull.* (2014), 3, 214-216
56. M. Sapnakumari, **B. Narayana**, K. Divya, K. Singh, S. Anthal, V. K. Gupta, R. Kant, Synthesis, Characterization and Crystal Structure of Ethyl 2-amino-4-(4-fluorophenyl)-6-phenylcyclohexa-1,3-diene-1-carboxylate, *Mol. Cryst. Liq. Cryst.* (2014), 605, 146-154
57. P. S. Nayak, **B. Narayana**, S. Anthal, V. K. Gupta, R. Kant, H. S. Yathirajan , Synthesis, Characterization, Crystal Structure and Thermal Analysis of 4-[(3-acetylphenyl)amino] -2-methylidene-4-oxobutanoic acid, *Mol. Cryst. Liq. Cryst.* (2013), **592**, 249-258.
58. P. S. Nayak, **B. Narayana**, S. Anthal, V. K. Gupta, R. Kant, Synthesis, Crystal Structure and Characterization of 2-Phenyl-N-(pyrazin-2-yl) acetamide. *Mol. Cryst. Liq. Cryst.* (2013), **592**, 199-208.
59. A. M. Owczarzak, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, M. Kubicki (2013): Pseudosymmetry, polymorphism and weak interactions: 4,4''-difluoro-5'-hydroxy-1,1':3',1''-terphenyl-4'-carboxylic acid and its derivatives. *Cryst. Eng. Comm.* (2013), **15**, 9893-9898 doi: 10.1039/C3CE41639A.
60. W. S. Loh, C. K. Quah, T. S. Chia, H. K. Fun, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, Synthesis and crystal structure of N-substituted pyrazolines, *Molecules.* (2013), **18**, 2386-2396.
61. J. P. Jasinski, C. J. Guild, A. E. Pek, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, R. J. Butcher, Synthesis and Crystal Structures of Four New Dihydropyridine derivatives, *J. Chem. Crystallogr.* (2013), **43**, 429-442, doi: 10.1007/s10870-013-0440-z.
62. R. Sharma, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, V. K. Gupta, R. Kant , Synthesis, characterization and crystal structure of 3'-[(4-fluorophenyl)carbonyl]-5'-(cydroxymethyl)-4'-phenylspiro [indole-3,2'-pyrrolidin]-2(1H)-one. *Eur. Chem. Bull.* (2013), **3**, 183-186.
63. M. Sapnakumari, **B. Narayana**, H. S. Yathirajan, J. P. Jasinski and R. J. Butcher, Ethyl 6-(2013): (4-chlorophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2013), E69, o1839-o1840.
64. M. Kaur, J. P. Jasinski, B. J. Anderson, H. S. Yathirajan, **B. Narayana**, N-(1,5-

- Dimethyl-3-oxo-2-phenyl-2,3-dihydro-1*H*-pyrazol-4-yl)-2-phenylacetamide, *Acta Cryst.* (2013), E69, o1726-o1727.
65. B. Narayana, M. Sapnakumari, J. P. Jasinski, P. M. Fraiser and H. S. Yathirajan, Ethyl 2-amino-6-(4-bromophenyl)-4-(4-fluorophenyl)cyclohexa-1,3-diene-1-carboxylate, *Acta Cryst.* (2013), E69, o1473.
66. J. P. Jasinski, J. P. St. John, R. J. Butcher, **B. Narayana**, H. S. Yathirajan, B. K. Sarojini, 4-Hydroxy-*N*-methylbenzamide, *Acta Cryst.* (2013), E69, o738.
67. P. S. Nayak, **B. Narayana**, J. P. Jasinski, H. S. Yathirajan, M. Kaur, 4-(3-Fluoro-4-methylanilino)-2-methylidene-4-oxobutanoic acid, *Acta Cryst.* (2013), E69, o1752.
68. P. S. Nayak, **B. Narayana**, Jerry P. Jasinski, H. S. Yathirajan and Manpreet Kaur, *N*-(1,3-Benzothiazol-2-yl)acetamide, *Acta Cryst.* (2013), E69, o1622.
69. B. K. Sarojini, **B. Narayana**, H. S. Yathirajan, T. Gerber, B. Van Brecht, R. Betz, 3-Chloro-4-fluoroanilinium picrate, *Acta Cryst.* (2013), E69, o240.
70. P. S. Nayak, **B. Narayana**, H. S. Yathirajan, T. Gerber, B. Van Brecht, R. Betz (2013): 4-(4-Iodoanilino)-2-methylene-4-oxobutanoic acid, *Acta Cryst.* (2013), E69, o83.
71. A. S. Praveen, H. S. Yathirajan, J. P. Jasinski, A. C. Keeley, **B. Narayana**, B. K. Sarojini, 2-(4-Chlorophenyl)-*N*-(3,4-difluorophenyl)acetamide, *Acta Cryst.* (2013), E69, o996-o997
72. B. K. Sarojini, **B. Narayana**, H. S. Yathirajan, Thomas Gerber, Eric Hosten, Richard Betz, Redetermination of the crystal structure of *N*-acetyl glycine (2-cetamidoacetic acid), C₄H₇NO₃, *Z. Kristallogr. NCS* (2013), 228, 245-246. (doi:10.1524/ncrs.2013.0125).
73. M. Sapnakumari, **B. Narayana**, S. Samshuddin, B. K. Sarojini, 2'-[(4-Fluorophenyl)carbonyl]-1'-phenyl-1',2',5',6',7',7a'-hexahydrospiro[indole-3,3'-pyrrolizin]-2(1*H*)-one, *Molbank.* (2013), **2013**, M802.
74. P. S. Nayak, **B. Narayana**, S. Samshuddin, B. K. Sarojini, 2-{[5-(Diphenylmethyl)-1,3,4-oxadiazol-2-yl]sulfanyl}-*N*-(pyrazin-2-yl)acetamide, *Molbank.* (2013), 2013, M800
75. M. S. Siddegowda, H. S. Yathirajan, **B. Narayana**, T. Gerber, E. Hosten, R. Betz, Redetermination of the structure of 4'-(bromomethyl)-[1,1'-biphenyl]-2-

- carbonitrile, C₁₄H₁₀BrN, *Z. Kristallogr. NCS.* (2013), **228**, 203-204 / doi:10.1524/ncrs.2013.0099
76. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, T. Gerber, E. Hosten, R. Betz , Redetermination of the structure of 3-methyl-1,5-di phen yl-4,5-dihydro-1*H*-pyrazole, C₁₆H₁₆N₂, *Z. Kristallogr. NCS.* (2013), **228**, 207-208 / doi:10.1524/ncrs.2013.0101
77. B. K. Sarojini, B. J. Mohan, **B. Narayana**, H. S. Yathirajan, J. P. Jasinski, R. J. Butcher, (*Z*)-4-[2-(2,4-Dimethylphenyl)hydrazinylidene]-3-methylpyrazol-5(1*H*)-one, *Acta Cryst.* (2013), **E69**, o532.
78. P. S. Nayak, **B. Narayana**, H. S. Yathirajan, J. P. Jasinski, R. J. Butcher, 2-(2,6-Dichlorophenyl)-*N*-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2013), **E69**, o523
79. R. Betz,, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, B. K. Sarojini, Crystal structure of (*2E*)-3-(biphenyl-4-yl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, C₃₄H₂₄F₂O₂. *Z. Kristallogr. NCS.* (2013), **228**, 147-149 / doi:10.1524/ncrs.2013.0075
80. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, B. K. Sarojini, Crystal structure of (*2E*)-3-(4-benzyloxyphenyl)-1--(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, C₃₅H₂₆F₂O₃. *Z. Kristallogr. NCS.* (2013) **228**, 144-146 / DOI 10.1524/ncrs.2013.0074.
81. . J. P. Jasinski, C. J. Guild, H. S. Yathirajan, **B. Narayana**, S. Samshuddin, *N*-(4-Bromophenyl)acetamide: a new polymorph, *Acta Cryst.* (2013), **E69**, o461.
82. A. S. Praveen, J. P. Jasinski, A. C. Keeley, H. S. Yathirajan, **B. Narayana** , (*E*)-*N*-(4-Fluorobenzylidene)-2-(3-methylphenyl)acetohydrazide, *Acta Cryst.* (2013), **E69**, o421.
83. A. Mahan, R. J. Butcher, P. S. Nayak, **B. Narayana**, H. S. Yathirajan, 2-(3,4-Dichlorophenyl)-*N*-(1,5-dimethyl-3-oxo-2-phenyl-2,3-dihydro-1*H*-pyrazol-4-yl)acetamide, *Acta Cryst.* (2013), **E69**, o402-o403.
84. C. N. Kavitha, H. S. Yathirajan, **B. Narayana**, T. Gerber, B. van Brecht, R. Betz , 4-[Bis(4-fluorophenyl)methyl]-1-[(*2E*)-3-phenylprop-2-en-1-yl]piperazin-1-ium 3-carboxypropanoate, *Acta Cryst.* (2013), **E69**, o260-o261.
85. . R. Kant, V. K. Gupta, K. Kapoor, P. S. Nayak, B. K. Sarojini, **B. Narayana**, A second monoclinic polymorph of 4-[(*E*)-(4-benzyloxybenzylidene)amino]-1,5-

- dimethyl-2-phenyl-1*H*-pyrazol-3(2*H*)-one, *Acta Cryst.* (2013), **E69**, o115.
86. . P. S. Nayak, **B. Narayana**, H. S. Yathirajan, T. Gerber, B. van Brecht, R. Betz , 4-(4-Iodoanilino)-2-methylene-4-oxobutanoic acid, *Acta Cryst.* (2013), **E69**, o83.
87. A. S. Praveen, J. P. Jasinski, S. T. Krauss, H. S. Yathirajan, **B. Narayana** , 6-(3-Chlorophenyl)imidazo[2,1-*b*][1,3,4]thiadiazole, *Acta Cryst.* (2013), **E69**, o66.
88. R. J. Butcher, A. Mahan, P. S. Nayak, **B. Narayana**, H. S. Yathirajan, 2-(2,6-Dichlorophenyl)-*N*-(1,5-dimethyl-3-oxo-2-phenyl-2,3-dihydro-1*H*-pyrazol-4-yl)acetamide, *Acta Cryst.* (2013), **E69**, o46-o47.
89. S. Samshuddin, **B. Narayana**, B. K. Sarojini, L. N. Madhu, A study on the reactions of alkyl 4,6-bis(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate and *in vitro* antioxidant activity of derivatives, *Med. Chem. Res.* (2013), **22**, 3002–3011. DOI 10.1007/s00044-012-0304-7.
90. K. Divya, **B. Narayana**, Visible spectrophotometric methods for the determination of silver sulfadiazine in bulk and dosage form, *J. Curr. Pharmaceut. Res.* (2013), **11**, 27-32.
91. B. J. Mohan, B. K. Sarojini, **B. Narayana**, G. Sanjeev, Radioprotective effect of an edaravone analogue 3-methyl-1-(4-(trifluoromethyl)phenyl)-1,2-dihydropyrazol-5-one. *Indo Am. J. Pharm. Res.* (2013), **12**, 9345-9353.
92. K. Divya, **B. Narayana**, M. Sapnakumari, P. S. Nayak, Spectrophotometric determination of frusemide using *N*-Halosuccinimides, *Oxidation communications* (2013) (Accepted)
93. **B. Narayana**, D. N. Shetty, A Facile Method for the Spectrophotometric Determination of Betamethasone Dipropionate in Pure and Dosage Forms, *Oxdn. Commun.* (2013), **35**, 993-999.
94. **B. Narayana**, K. Divya, P. S. Nayak, Selective and validated spectrophotometric methods for the determination of midazolam using *N*-bromosuccinimide, *J. Chem. Phar. Res.* (2013), **5**, 268-274
95. K. Divya , **B. Narayana**, Validated spectrophotometric methods for the determination of diclofenac diethylamine, *Int. J. Phar. Sci. Res.* (2013), **4**, 3635-3640.
96. **B. Narayana**, K. Veena, A New System for the Determination of Selenium Using Spectrophotometry, *Oxdn. Commun.* (2013), **35**, 691-701.

97. **B. Narayana**, K. Veena , New Reagents for the Spectrophotometric Determination of Chromium, *Oxdn. Commun.* (2013), **35**,702-709
98. **B. Narayana**, N. V. Sreekumar, D. N. Shetty, A Rapid and Sensitive Spectrophotometric Method for the Determination of Hydrogen Peroxide by Using a Redox Reaction, *Oxdn. Commun.* (2013), **35**, 415-421.
99. K. Divya, **B. Narayana**, M.Sapnakumari, Sensitive spectrophotometric determination of Paracetamol and Protriptyline HCl using 3-chloro-7-hydroxy-4-methyl-2H-chromen-2-one, *ISRN Spectroscopy* (2013), dx.doi.org/10.1155/2013/935819.
100. **B. Narayana**, K. Ashwini, A Facile Method for the Spectrophotometric determination of of Citalopram Hydrobromide by Oxidation Reaction, *Oxdn. Commun.* (2013), **35**, 386-394.
101. K. Ashwini, **B. Narayana**, Spectrophotometric Determination of Frusemide by its Oxidation with Potassium Iodate, *Oxdn. Commun.* (2013), **35**, 395-400.
102. S. Samshuddin, **B. Narayana**, B.K. Sarojini, L.N. Madhu, A study on the reactions of alkyl 4,6-bis(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate and in vitro antioxidant activity of derivatives, *Med. Chem. Res.* (2012), **22**, 3002-3011 DOI: 10.1007/s00044-012-0304-7.
103. A. S. Praveen, J. P. Jasinski, S. T. Krauss, H. S. Yathirajan, **B. Narayana**, 2-(4-Methylphenyl)acetohydrazide, *Acta Cryst.* (2012), **E68**, o3467.
104. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, T. Gerber, E. Hosten, R. Betz ,4-Methoxy-4-methyl-6-phenyl-1,3-diazinane-2-thione, *Acta Cryst.* (2012), **E68**, o3271.
105. P. S. Nayak, **B. Narayana**, H. S. Yathirajan, T. Gerber, E. Hosten and R. Betz , [3-Benzoyl-2,4-bis(3-nitrophenyl)cyclobutyl](phenyl)methanone, *Acta Cryst.* (2012), **E68**, o3272-o3273.
106. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, T. Gerber, E. Hosten, R. Betz (2E)-3-(4-Bromophenyl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o3433-o3434.
107. A. S. Praveen, J. P. Jasinski, A. C. Keeley, H. S. Yathirajan, **B. Narayana** , (E)-N-(4-Methoxybenzylidene)-2-m-tolylacetohydrazide, *Acta Cryst.* (2012), **E68**, o3435.

108. A. S. Praveen, J. P. Jasinski, A. C. Keeley, H. S. Yathirajan, **B. Narayana**, 2-(2-Nitrophenyl)acetohydrazide, *Acta Cryst.* (2012), **E68**, o3436.
109. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, T. Gerber, E. Hosten, R. Betz, 3,5-Bis(4-fluorophenyl)-1-(4-nitrophenyl)-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* (2012), **E68**, o3216-o3217.
110. U. Kundapur, B. K. Sarojini and **B. Narayana**, 2-(4-Fluoro-3-nitrophenyl)-6-(4-methoxyphenyl)imidazo [2,1-*b*]-1,3,4-thiadiazole, *Molbank.* (2012), **2012**, M778.
111. R. Kant, V. K. Gupta, K. Kapoor, S. Samshuddin, **B. Narayana**, B. K. Sarojini, *N*-[(*E*)-4-Hydroxybenzylidene]-2-(naphthalen-2-yloxy)acetohydrazide, *Acta Cryst.* (2012), **E68**, o2923-o2924.
112. R. Kant, V. K. Gupta, K. Kapoor, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, Ethyl 6-(4-bromophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2012), **E68**, o2917-o2918.
113. J. P. Jasinski, J. A. Golen, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, Synthesis, characterization and crystal structures of 3,5-bis(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazole-1-carboxamide and 3,5-bis(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazole-1-carbothioamide, *Crystals.* (2012), **2**, 1108-1115.
114. M. Kaur, J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, Crystal and molecular structure studies of ethyl 4-(4-hydroxyphenyl)-6-(6-methoxy-2-naphthyl)-2-oxocyclohex-3-ene-1-carboxylate and ethyl 4-(3-bromophenyl)-6-(6-methoxy-2-naphthyl)-2-oxocyclohex-3-ene-1-carboxylate, *Crystals.* (2012), **2**, 1239-1247.
115. H. K. Fun, A. Farhadikoutenaeei, B. K. Sarojini, B. J. Mohan, **B. Narayana**, Ethyl 6-(4-methoxyphenyl)-2-oxo-4-phenylcyclohex-3-enecarboxylate, *Acta Cryst.* (2012), **E68**, o2788-o2789.
116. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, (2*E*)-3-[4-(Benzyloxy)phenyl]-1-(pyridin-3-yl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o2724.
117. H. K. Fun, C. K. Quah, B. K. Sarojini, B. J. Mohan, **B. Narayana**, 1-(6-Chloro-1,3-benzothiazol-2-yl)-2-[1-(4-methoxyphenyl)ethylidene]hydrazine, *Acta Cryst.* (2012), **E68**, o2682.

118. H. K. Fun, T. S. Chia, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, 5-(4-Bromophenyl)-3-(4-fluorophenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* (2012), **E68**, o2680.
119. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(4-Chlorophenyl)-*N*-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2679.
120. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(4-Bromophenyl)-*N*-(2,6-dimethylphenyl)acetamide, *Acta Cryst.* (2012), **E68**, o2678.
121. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(1,5-Dimethyl-3-oxo-2-phenyl-2,3-dihydro-1*H*-pyrazol-4-yl)-2-[4-ethylsulfanyl]phenyl] acetamide, *Acta Cryst.* (2012), **E68**, o2677.
122. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2,2-Diphenyl-*N*-(2,4,5-trichlorophenyl)acetamide, *Acta Cryst.* (2012), **E68**, o2659–o2660.
123. H. K. Fun, A. Farhadikoutenaei, **B. Narayana**, P. S. Nayak, B. K. Sarojini, (2*E*)-3-(2-Fluorophenyl)-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o2658.
124. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(2-Bromophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2657.
125. H. K. Fun, W. S. Loh, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]butan-1-one, *Acta Cryst.* (2012), **E68**, o2655–o2656.
126. H. K. Fun, C. W. Ooi, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, 1-[3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2012), **E68**, o2634.
127. H. K. Fun, T. S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, *N*-(1,3-Dioxo-2,3-dihydro-1*H*-isoindol-2-yl)-4,4"-difluoro-5'-hydroxy-1,1':3,1"-terphenyl-4'-carboxamide, *Acta Cryst.* (2012), **E68**, o2619–o2620.
128. H. K. Fun, W. S. Loh, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2012), **E68**, o2586.
129. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(2-Fluorophenyl)-*N*-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2565.

130. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(4-Bromophenyl)-N-(3-chloro-4-fluorophenyl)acetamide, *Acta Cryst.* (2012), **E68**, o2558.
131. H. K. Fun, W. S. Loh, P. S. Nayak, **B. Narayana**, B. K. Sarojini, N-(4-Chlorophenyl) 2, 2-diphenylacetamide, *Acta Cryst.* (2012), **E68**, o2556–o2557.
132. H. K. Fun, C. W. Ooi, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(4-Bromophenyl) N-(5-methylpyridin-2-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2526.
133. R. Srinivasan, **B. Narayana**, S. Samshuddin, B. K. Sarojini, 4-[5-(3,5-Difluorophenyl)furan-2-yl]-2,3,7-triazaspiro[4.5]dec-3-en-1-one hydrochloride, *Molbank* (2012), M773.
134. R. Srinivasan, **B. Narayana**, S. Samshuddin, B. K. Sarojini, 3-(4-Fluorophenyl)-N-[4-(4-furan-2-yl-1-oxo-2,3,7-triazaspiro[4.5]dec-3-en-2-yl)phenyl]propionamide hydrochloride, *Molbank* (2012), **2012**, M771.
135. R. Srinivasan, **B. Narayana**, S. Samshuddin, B. K. Sarojini, N-(3,4-Dimethoxy phenyl)-4-oxo-2,3,7-triazaspiro[4.5]dec-1-ene-1-carboxamide Hydrochloride, *Molbank* (2012), **2012**, M769.
136. S. Samshuddin, **B. Narayana**, Divya N. Shetty, R. Srinivasan, B. K. Sarojini, (2E)-3-[4-(1H-Benzimidazol-2-ylmethoxy)-3-methoxyphenyl]-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Molbank* (2012), **2012**, M764.
137. R. Srinivasan, **B. Narayana**, S. Samshuddin, B. K. Sarojini, tert-Butyl 1-(Furan-2-yl)-4-oxo-2,3,7-triazaspiro[4.5]dec-1-ene-7-carboxylate, *Molbank* (2012), **2012**, M757.
138. M. Kubicki, G. Dutkiewicz, A. S. Praveen, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, Two crystal forms of 4-[(2E)-2-[1-(4-methoxyphenyl)ethylidene]hydrazinyl]-8-(trifluoromethyl)quinoline, *J. Chem. Crystallogr.* (2012), **42**, 432–437.
139. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2-(Naphthalen-1-yl)-N-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2464.
140. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, N-(4-Chlorophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2012), **E68**, o2463.
141. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 1-(3-

- Bromophenyl)thiourea, *Acta Cryst.* (2012), **E68**, o2462.
142. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(1,3-Thiazol-2-yl)-2-(2,4,6-trimethylphenyl)acetamide, *Acta Cryst.* (2012), **E68**, o2461.
143. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 1-(2,4-Difluorophenyl)thiourea, *Acta Cryst.* (2012), **E68**, o2460.
144. H. K. Fun, C. K. Quah, B. K. Sarojini, B. J. Mohan, **B. Narayana**, 1-(5-Chloro-6-fluoro-1,3-benzothiazol-2-yl)hydrazine, *Acta Cryst.* (2012), **E68**, o2459.
145. H. K. Fun, C. K. Quah, Divya N. Shetty, **B. Narayana**, B. K. Sarojini, 2-Chloro-1-(4-hydroxyphenyl)ethanone, *Acta Cryst.* (2012), **E68**, o2424.
146. H. K. Fun, C. K. Quah, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 1-(3-Chlorophenyl)thiourea, *Acta Cryst.* (2012), **E68**, o2423.
147. R. Kant, V. K. Gupta, K. Kapoor, S. Samshuddin and **B. Narayana**, 2-[3,5-Bis(4-methoxyphenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]-4,6-bis(4-methoxyphenyl)pyrimidine, *Acta Cryst.* (2012), **E68**, o2398.
148. R. Kant, V.K. Gupta, K. Kapoor, S. Samshuddin, **B. Narayana**, (2*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-[4-(methylsulfanyl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o2378.
149. H. K. Fun, W. S. Loh, B. K. Sarojini, B. J. Mohan, **B. Narayana**, 1-[2,6-Dichloro-4-(trifluoromethyl)phenyl]-3,4-dimethylpyrano[2,3-*c*]pyrazol-6(1*H*)-one, *Acta Cryst.* (2012), **E68**, o2350.
150. H. K. Fun, W. S. Loh, Divya N. Shetty, **B. Narayana**, B. K. Sarojini, *N'*-[(*E*)-4-Chlorobenzylidene]pyridine-4-carbohydrazide monohydrate, *Acta Cryst.* (2012), **E68**, o2303-o2304.
151. R. Kant, V. K. Gupta, K. Kapoor, M. Sapnakumari, B. K. Sarojini, **B. Narayana**, (1*Z*)-1-[(2*E*)-3-(4-Bromophenyl)-1-(4-fluorophenyl)prop-2-en-1-ylidene]-2-(2,4-dinitrophenyl)hydrazine, *Acta Cryst.* (2012), **E68**, o2193.
152. H. K. Fun, W. S. Loh, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (2*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(2-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o2024.
153. R. Kant, V. K. Gupta, K. Kapoor, **B. Narayana**, 2-(2-Chlorophenyl)acetic acid, *Acta Cryst.* (2012), **E68**, o1940.

154. H. K. Fun, W. S. Loh, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(4-Cyanophenyl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1877-o1878.
155. H. K. Fun, S. Arshad, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 3,5-Bis(4-fluorophenyl)isoxazole, *Acta Cryst.* (2012), **E68**, o1783.
156. R. Kant, K. Kapoor, **B. Narayana**, 2-(2-Bromophenyl)acetic acid, *Acta Cryst.* (2012), **E68**, o1704.
157. H. K. Fun, C. W. Ooi, S. Samshuddin, **B. Narayana**, B. K. Sarojini, [2,6-Bis(biphenyl-4-yl)-4-hydroxy-4-(pyridin-2-yl)cyclohexane-1,3-diyl]bis[(pyridin-2-yl)methanone]-butan-2-one (1/1), *Acta Cryst.* (2012), **E68**, o1633-o1634.
158. H. K. Fun, T. S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (2*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(2,6-difluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1560-o1561.
159. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, R. Betz, T. Gerber, E. Hosten, (*E*)-3-(2-Chlorophenyl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1538-o1539.
160. H. K. Fun, C.W. Ooi, Divya N. Shetty, **B. Narayana**, B. K. Sarojini, 4-Methylbenzoic acid-*N'*-[(*E*)-4-methylbenzylidene]pyridine-4-carbohydrazide-water (1/1/1), *Acta Cryst.* (2012), **E68**, o1492.
161. H. K. Fun, C. K. Quah, Divya N. Shetty, **B. Narayana**, B. K. Sarojini, *N'*-(2,6-Difluorobenzylidene)pyridine-4-carbohydrazide, *Acta Cryst.* (2012), **E68**, o1484.
162. H. K. Fun, T. S. Chia, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, (2*E*)-1-(2,4-Dichlorophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1465.
163. A. S. Praveen, H. S. Yathirajan, **B. Narayana**, T. Gerber, E. Hosten, R. Betz, 4-[(1*E*)-3-(2,6-Dichloro-3-fluorophenyl)-3-oxoprop-1-en-1-yl]benzotrile, *Acta Cryst.* (2012), **E68**, o1413.
164. H. K. Fun, C. K. Quah, P.S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(2,6-Dichlorophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2012), **E68**, o1385.
165. H. K. Fun, C. W. Ooi, P. S. Nayak, **B. Narayana** and B. K. Sarojini, *N*-(3,4-Difluorophenyl)-2,2-diphenylacetamide, *Acta Cryst.* (2012), **E68**, o1349-o1350.

166. H. K. Fun, W. S. Loh, Divya N. Shetty, **B. Narayana**, B. K. Sarojini, *N*-(3-Chloro-4-fluorophenyl)acetamide, *Acta Cryst.* (2012), **E68**, o1348.
167. G. Dutkiewicz, Divya N. Shetty, **B. Narayana**, H. S. Yathirajan and M. Kubicki, 4-[(4-Benzyloxybenzylidene)*E*amino]-1,5-dimethyl-2-phenyl-1*H*-pyrazol-3(2*H*)-one, *Acta Cryst.* (2012), **E68**, o1324.
168. H. K. Fun, T. S. Chia, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(2,4-Dimethylphenyl)-2,2-diphenylacetamide, *Acta Cryst.* (2012), **E68**, o1316-o1317.
169. H. K. Fun, T. S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(2-Bromophenyl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1314-o1315.
170. H. K. Fun, C. W. Ooi, P. S. Nayak, **B. Narayana**, B. K. Sarojini, 2,2-Diphenyl-*N*-(1,3-thiazol-2-yl)acetamide, *Acta Cryst.* (2012), **E68**, o1312-o1313.
171. H. K. Fun, T. S. Chia, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(2,6-Dimethylphenyl)-2,2-diphenylacetamide, *Acta Cryst.* (2012), **E68**, o1287-o1288.
172. A. S. Praveen, J. P. Jasinski, J. A. Golen, H. S. Yathirajan, **B. Narayana**, (2*E*)-1-(2,6-Dichloro-3-fluorophenyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o1163.
173. B. Golzarroshan, M. S. Siddegowda, Hong qi Li, H. S. Yathirajan, **B. Narayana**, R. S. Rathore, Imatinib (Gleevec) conformations observed in single crystals, protein-Imatinib co-crystals and molecular dynamics: Implications for drug selectivity, *J. Mol Struct.* (2012), **1018**, 107–112.
174. A. S. Dayananda, G. Dutkiewicz, H. S. Yathirajan, **B. Narayana**, M. Kubicki, Very short intramolecular hydrogen bonds in the crystal structure of 1-[bis(4-fluorophenyl)methyl]piperazinedium dimaleate, *J. Chem. Cryst.* (2012), **42**, 1046-1051 (DOI 10.1007/s10870-012-0357-y).
175. A. S. Dayananda, R. J. Butcher, M. Akkurt, H. S. Yathirajan, **B. Narayana**, Triprolidinium dichloranilate-chloranilic acid-methanol-water (2/1/2/2), *Acta Cryst.* (2012), **E68**, o1037-o1038.
176. H. K. Fun, C. K. Quah, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 1-[3-(4-Chlorophenyl)-5-(4-methoxyphenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2012), **E68**, o1023.
177. H. K. Fun, T. S. Chia, P. S. Nayak, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(3-Nitrophenyl)-1-[4-(piperidin-1-yl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2012),

E68, o974.

178. H. K. Fun, C. K. Quah, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 1-[3-(4-Chlorophenyl)-5-(4-methoxyphenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]butan-1-one, *Acta Cryst.*(2012), **E68**, o975.
179. M. Kubicki, G. Dutkiewicz, J. P. Jasinski, R. J. Butcher, M. S. Siddegowda, H. S. Yathirajan, **B. Narayana**, Ordering of the water molecule in the crystal structure of 2-[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methylthio-1*H*-benzimidazole hydrate (Lansoprazole sulphide hydrate), *J. Chem. Cryst.* (2012), **42**, 245–250.
180. H. K. Fun, C. K. Quah, S. Priya, **B. Narayana**, B. K. Sarojini, 1-[5-(4-Chlorophenyl)-3-(4-hydroxyphenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2012), **E68**, o818.
181. H. K. Fun, T. S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 2-[3,5-Bis(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]-4,6-bis(4-fluorophenyl)pyrimidine, *Acta Cryst.* (2012), **E68**, o807-o808.
182. H. K. Fun, C.W. Ooi, B. K. Sarojini, B. J. Mohan, **B. Narayana**, 1-(6-Chloro-1,3-benzothiazol-2-yl)hydrazine, *Acta Cryst.* (2012), **E68**, o691-o692.
183. H. K. Fun, S. Arshad, S. Samshuddin, **B. Narayana**, B. K. Sarojini, Ethyl ({5-[5'-(2-ethoxy-2-oxoethoxy)-4,4"-difluoro-1,1':3',1"-terphenyl-4'-yl]-1,3,4-oxadiazol-2-yl}sulfanyl)acetate, *Acta Cryst.* (2012), **E68**, o674-o675.
184. J. P. Jasinski, J. A. Golen, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, (6*Z*)-3,5-Bis(4-fluorophenyl)-6-(1-hydroxyethylidene)cyclohex-2-en-1-one, *Acta Cryst.* (2012), **E68**, o638- o639.
185. H. K. Fun, T. S. Chia, M. Sapnakumari, **B. Narayana**, B. K. Sarojini, (*E*)-3-(4-Chlorophenyl)-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o629.
186. J. P. Jasinski, J. A. Golen, S. Samshuddin, **B. Narayana**, H. S. Yathirajan (2012) Ethyl 2-amino-4,6-bis(4-fluorophenyl)cyclohexa-1,3-diene-1-carboxylate, *Acta Cryst.* (2012), **E68**, o585.
187. H. K. Fun, M. Hemamalini, K. Divya, **B. Narayana**, B. K. Sarojini, Methyl *N*-({[2-(2-methoxyacetamido)-4-(phenylsulfanyl)phenyl]amino}[(methoxycarbonyl)imino]methyl)-carbamate, *Acta Cryst.* (2012), **E68**, o581-o582.
188. H. K. Fun, T. Shahani, P. S. Nayak, **B. Narayana**, B. K. Sarojini, *N*-(4-Bromophenyl)-2-(4-chlorophenyl) acetamide, *Acta Cryst.* (2012), **E68**, o519.

189. R. Betz, T. Gerber, E. Hosten, A. S. Praveen, H. S. Yathirajan and **B. Narayana**, (2*E*)-1-(2,6-Dichloro-3-fluorophenyl)-3-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2012), **E68**, o512.
190. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, B. K. Sarojini 2,2'-(Disulfanediyl)bis[4,6-(4-fluorophenyl)pyrimidine, *Acta Cryst.* (2012), **E68**, o476-o477.
191. J. P. Jasinski, J. A. Golen, B. P. Siddaraju, **B. Narayana**, H. S. Yathirajan, 1,3-Bis(biphenyl-4-yl)-2,2-dibromo-3-oxopropyl acetate, *Acta Cryst.* (2012), **E68**, o362-o363.
192. A. S. Praveen, J. P. Jasinski, J. A. Golen, H. S. Yathirajan, **B. Narayana**, *N*-(4,6-Dimethoxypyrimidin-2-yl)-2-(3-methylphenyl)acetamide, *Acta Cryst.* (2012) **E68**, o226-o227.
193. H. K. Fun, T. S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, Ethyl 4,4''-difluoro-5'-methoxy-1,1':3',1''-terphenyl-4'-carboxylate, *Acta Cryst.* (2012), **E68**, o172.
194. H. K. Fun, M. Hemamalini, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 1-(4,4''-Difluoro-5'-methoxy-1,1':3',1''-terphenyl-4'-yl)ethanone, *Acta Cryst.* (2012), **E68**, o163.
195. J. P. Jasinski, J. A. Golen, A. S. Praveen, **B. Narayana**, H. S. Yathirajan, 1,2-Bis(3-phenoxybenzylidene)hydrazine, *Acta Cryst.* (2012), **E68**, o81.
196. S. Samshuddin, R. J. Butcher, S. O. Yildirim, M. Akkurt, **B. Narayana**, H. S. Yathirajan, (2*E*)-2-[(3*E*)-4-Phenylbut-3-en-2-ylidene]hydrazinecarboxamide, *Acta Cryst.* (2012), **E68**, o76-o77.
197. S. Samshuddin, R. J. Butcher, M. Akkurt, **B. Narayana**, B. K. Sarojini, H. S. Yathirajan, (1*E*,4*E*)-1-(3-Nitrophenyl)-5-phenylpenta-1,4-dien-3-one, *Acta Cryst.* (2012), **E68**, o74-o75.
198. J. P. Jasinski, J. A. Golen, A. S. Praveen, **B. Narayana**, H. S. Yathirajan, 1,2-Bis[(1,3-benzodioxol-5-yl)methylidene]hydrazine, *Acta Cryst.* (2012), **E68**, o7.
199. M. Sapnakumari, **B. Narayana**, S. Samshuddin, B.K. Sarojini, Synthesis and characterization of new 1,2-diazepine derivative, *Der Pharma Chemica* (2012), **4**, 2198-2201.
200. S. Samshuddin, **B. Narayana**, B. K. Sarojini, D. N. Shetty, N. S. Kumari,

Synthesis characterization and biological evaluation of some new functionalized terphenyl derivatives, *Int. J. Med. Chem.* (2012) Article ID 530392, 13 pages

201. K. Divya, **B. Narayana**, New visible spectrophotometric methods for the determination of protriptyline HCl in bulk and pharmaceutical formulations, *J. Chem. Pharm. Res.* (2012), **4**, 4352-4358.
202. D. N. Shetty, **B. Narayana**, Simple methods for the spectrophotometric determination of carvedilol, *ISRN Spectroscopy* (2012), Article ID 373215, 6 pages
203. S. Samshuddin, **B. Narayana**, B.K. Sarojini, H.S. Yathirajan, R. Raghavendra, Synthesis, characterization and biological evaluation of functionalized derivatives of versatile synthon 4,4'-difluoro chalcone, *Der Pharma Chemica* (2012), **4**, 1445-1457
204. D. N. Shetty, **B. Narayana**, S. Samshuddin, Novel reagents for the spectrophotometric determination of isoniazid, *ISRN Spectroscopy* (2012), Article ID 869493, 5 pages.
205. S. Samshuddin, **B. Narayana**, B.K. Sarojini, R. Srinivasan, Vinayachandra, K.R. Chandrashekar, Synthesis, characterization and biological evaluation of some pyrazoles derived from α,β -dibromo 4,4'-difluoro chalcone, *Der Pharma Chemica* (2012), **4**, 587-592.
206. D. N. Shetty, **B. Narayana**, S. Samshuddin, Sensitive methods for the spectrophotometric determinations of some antimalarial drugs, *Journal of Chemical and Pharmaceutical Research* (2012), **4**, 1647-1653.
207. S. Samshuddin, **B. Narayana**, Z. Baktir, M. Akkurt, H. S. Yathirajan, Synthesis, characterization and crystal structure of 1-[3,5-bis(4-fluorophenyl)-4,5-dihydro-1H-pyrazol-1-yl]propan-1-one, *Der Pharma Chemica* (2011), **3**, 487-492.
208. H. K. Fun, T. Shahani, S. Samshuddin, **B. Narayana**, B. K. Sarojini. (2E)-3-(3-Bromo-4-methoxyphenyl)-1-(4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**,o3514.
209. H. K. Fun, T.S. Chia, S. Samshuddin, **B. Narayana**, B. K. Sarojini, Methyl 4,4"-difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-carboxylate, *Acta Cryst.* (2011), **E67**,o3390.
210. S. Samshuddin, **B. Narayana** and B. K. Sarojini, Ethyl 4,4"-Difluoro-5'-hydroxy-1,1':3',1"-terphenyl-4'-carboxylate, *Molbank* (2011), **2011**, M745.
211. H. K. Fun, S. Arshad, S. Samshuddin, **B. Narayana**, B. K. Sarojini, 5-(4,4"-Difluoro-5'-hydroxy-1,1':3',1"-terphenyl-4'-yl)-3-(morpholin-4-ylmethyl)-1,3,4-

- oxadiazole-2(3*H*)- thione, *Acta Cryst.* (2011), **E67**, o337.
212. H. K. Fun, M. Hemamalini, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(6-methoxynaphthalen-2-yl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o3327-o3328.
213. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, (*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o3323-o3324.
214. J. P. Jasinski, J. A. Golen, A. S. Praveen, H. S. Yathirajan, **B. Narayana** (2011) 4-Chloro-anilinium 4-methylbenzenesulfonate, *Acta Cryst.* (2011), **E67**, o3288-o3289.
215. H. K. Fun, M. Hemamalini, K. Umesha, B. K. Sarojini, **B. Narayana**, 6-Fluoro-2-(4-methoxyphenyl)imidazo[2,1-b][1,3]benzothiazole, *Acta Cryst.* (2011), **E67**, o3265-o3266.
216. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, (*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(4-methylphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o3181-o3182.
217. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, H.S. Yathirajan, (*E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o3179-o3180.
218. R. Betz, T. Gerber, E. Hosten, S. Samshuddin, **B. Narayana**, B. K. Sarojini, (*2E*)-1-(4,4"-Difluoro-5'-methoxy-1,1':3',1"-terphenyl-4'-yl)-3-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o2996-o2997.
219. H. K. Fun, C. K. Quah, **B. Narayana**, P. S. Nayak, B. K. Sarojini, *N*-(3,5-Dichlorophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2011), **E67**, o2941-o2942.
220. H. K. Fun, C. K. Quah, **B. Narayana**, P. S. Nayak, B. K. Sarojini, *N*-(4-Bromophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2011), **E67**, o2926-o2927.
221. J. P. Jasinski, J. A. Golen, A. S. Praveen, H. S. Yathirajan, **B. Narayana**, 3-Chloroanilinium 4-methylbenzenesulfonate, *Acta Cryst.* (2011), **E67**, o2925.
222. J. P. Jasinski, J. A. Golen, A. S. Praveen, H. S. Yathirajan, **B. Narayana**, 3-Fluoroanilinium 4-methylbenzenesulfonate, *Acta Cryst.* (2011), **E67**, o2924.

223. H. K. Fun, W. S. Loh, B. K. Sarojini, V. M. Khaleel, **B. Narayana**, 2,3-Dibromo-3-(4-chlorophenyl)-1-(2-hydroxyphenyl)propan-1-one, *Acta Cryst.* (2011), **E67**, o2651-o2652.
224. A. S. Praveen, J. P. Jasinski, J. A. Golen, **B. Narayana**, H. S. Yathirajan, *N*-(3-Chloro-4-fluorophenyl)-2,2-diphenylacetamide, *Acta Cryst.* (2011), **E67** o2604.
225. A. S. Praveen, J. P. Jasinski, J. A. Golen, H. S. Yathirajan, **B. Narayana**, *N*-(4-Chloro-1,3-benzothiazol-2-yl)-2-(3-methylphenyl)acetamide monohydrate, *Acta Cryst.* (2011), **E67**, o2602-o2603
226. J. P. Jasinski, J. A. Golen, M. S. Siddegowda, H. S. Yathirajan, **B. Narayana**, [3-(5-Hydroxy-5*H*-dibenzo[*a,d*]cyclohepten-5-yl)propyl]dimethylammonium 3-carboxyprop-2-enoate, *Acta Cryst.* (2011), **E67**, o2600-o2601.
227. R. Betz, T. Gerber, E. Hosten, A. S. Dayananda, H. S. Yathirajan, **B. Narayana**, 4-[Bis(4-fluorophenyl)methyl]piperazin-1-ium picrate, *Acta Cryst.* (2011), **E67**, o2587-o2588.
228. J. P. Jasinski, J. A. Golen, A. S. Praveen, H. S. Yathirajan, **B. Narayana** Methyl 3,5-dibromo-2-diacetylaminobenzoate, *Acta Cryst.* (2011), **E67**, o2503.
229. A. S. Dayananda, J. P. Jasinski, J. A. Golen, H. S. Yathirajan and **B. Narayana** (2011) *N,N*-Dimethyl-3-oxo-3-(thiophen-2-yl)propanaminium chloride, *Acta Cryst.* (2011), **E67**, o2271.
230. M. S. Siddegowda, R. J. Butcher, M. Akkurt, H. S. Yathirajan, **B. Narayana**, 1-(2-Hydroxyethyl)-4-[3-(2-trifluoromethyl-9*H*-thioxanthen-9-ylidene)propyl]piperazine-1,4-dium dichloride: the dihydrochloride salt of flupentixol, *Acta Cryst.* (2011), **E67**, o2079-o2080.
231. J. P. Jasinski, J. A. Golen, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 4-(1*H*-Benzimidazol-2-ylmethoxy)-3-methoxybenzaldehyde tetrahydrate, *Acta Cryst.* (2011), **E67**, o2021-o2022.
232. S. Samshuddin, R. J. Butcher, M. Akkurt, **B. Narayana**, H. S. Yathirajan, 3, 5-Bis(4-methoxyphenyl)-4,5-dihydroisoxazole, *Acta Cryst.* (2011), **E67**, o1975-o1976.
233. S. Samshuddin, R. J. Butcher, M. Akkurt, **B. Narayana**, H. S. Yathirajan, B. K. Sarojini, 1,3-Bis(4-fluorophenyl)-*N,N'*-(propane-1,3-diylidene)dihydroxylamine, *Acta Cryst.* (2011), **E67**, o1954-o1955.

234. H. K. Fun, W. S. Loh, B. K. Sarojini, K. Umesha and **B. Narayana**, Methyl (2Z)-2-(2-fluoro-4-methoxybenzylidenE)-5-(4-methoxyphenyl)-7-methyl-3-oxo-2,3-dihydro-5H-[1,3]thiazolo[3,2-a]pyrimidine-6-carboxylate, *Acta Cryst.* (2011), **E67**, o1913-o1914.
235. A. S. Praveen, J. P. Jasinski, J. A. Golen, **B. Narayana**, H. S. Yathirajan, N-(3-Chloro-4-fluorophenyl)-2-(naphthalen-1-yl)acetamide, *Acta Cryst.* (2011), **E67**, o1826.
236. H. K. Fun, M. Hemamalini, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, 4-(4-Chlorophenyl)-4-hydroxypiperidinium 2-(2-phenylethyl)benzoate, *Acta Cryst.* (2011), **E67**, o1726.
237. H. K. Fun, M. Hemamalini, M. S. Siddegowda, H. S. Yathirajan, **B. Narayana** Melitracanium chloride, *Acta Cryst.* (2011), **E67**, o1725.
238. H. K. Fun, W. S. Loh, M. S. Siddegowda, H. S. Yathirajan, **B. Narayana**, Opipramol, *Acta Cryst.* (2011), **E67**, o1598.
239. H. K. Fun, C. S. Yeap, M. S. Siddegowda, H. S. Yathirajan, **B. Narayana**, Cyclobenzaprinium salicylate, *Acta Cryst.* (2011), **E67**, o1584.
240. J. P. Jasinski, J. A. Golen, C. S. Chidan Kumar, **B. Narayana**, H. S. Yathirajan, (1E,2E)-1,2-Bis(3-bromo-4-methoxybenzylidenE)hydrazine, *Acta Cryst.* (2011), **E67**, o1379.
241. H. K. Fun, S. Arshad, B. K. Sarojini, V. M. Khaleel, **B. Narayana**, (2E)-3-(3-Benzyloxyphenyl)-1-(2-hydroxy-5-methylphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1372-73.
242. R. J. Butcher, M. Akkurt, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 4,6-Bis(4-fluorophenyl)-2-phenyl-1H-indazol-3(2H)-one, *Acta Cryst.* (2011), **E67**, o1346-o1347.
243. H. K. Fun, W. S. Loh, B. K. Sarojini, V. M. Khaleel, **B. Narayana**, (2E)-3-[3-(Benzyloxy)phenyl]-1-(2-hydroxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1313-o1314.
244. Z. Baktir, M. Akkurt, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 3,5-Bis(4-fluorophenyl)-4,5-dihydro-1H-pyrazole-1-carbaldehyde, *Acta Cryst.* (2011), **E67**, o1292-o1293.
245. Z. Baktir, M. Akkurt, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 2,4-Bis(4-

- fluorophenyl)-2,3-dihydro-1*H*-1,5-benzodiazepine, *Acta Cryst.* (2011), **E67**, o1262-o1263.
246. H. K. Fun, S. Arshad, B. K. Sarojini, V. M. Khaleel, **B. Narayana**, (2*E*)-1-(2-Hydroxy-5-methylphenyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1248-1249.
247. G. Dutkiewicz, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, M. Kubicki, (2*E*)-3-(3-Bromo-4-methoxyphenyl)-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1090.
248. M. Akkurt, Z. Baktir, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, (2*E*)-3-[4-(1*H*-Benzimidazol-2-ylmethoxy)phenyl]-1-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1088-o1089.
249. G. Dutkiewicz, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, M. Kubicki, (2*E*)-3-(3-Bromo-4-methoxyphenyl)-1-(4-methylphenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o1024.
250. R. J. Butcher, M. Akkurt, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 3,5-Bis(4-methylphenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* (2011), **E67**, o1019.
251. J. P. Jasinski, W. M. Miller, S. Samshuddin, **B. Narayana**, H. S. Yathirajan (2*E*)-3-{4-[(1*H*-1,3-Benzimidazol-2-yl)methoxy]-3-ethoxyphenyl}-1-(4-bromophenyl)prop-2-en-1-one monohydrate, *Acta Cryst.* (2011), **E67**, o834-o835.
252. J. P. Jasinski, R. J. Butcher, V. M. Khaleel, B. K. Sarojini, **B. Narayana**, (2*E*)-3-(3,4-Dimethoxyphenyl)-1-(4-hydroxyphenyl)prop-2-en-1-one. *Acta Cryst.* (2011), **E67**, o813.
253. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-arique, H. S. Yathirajan, **B. Narayana**, Ethane-1,2-diaminium dipicrate dihydrate, *Acta Cryst.* (2011), **E67**, o637-o638.
254. J. P. Jasinski, A. E. Pek, P. S. Nayak, **B. Narayana** and H. S. Yathirajan, 1-(10*H*-Phenothiazin-2-yl)ethanone, *Acta Cryst.* (2011), **E67**, o430-o431.
255. G. Dutkiewicz, **B. Narayana**, K. Veena, H. S. Yathirajan, M. Kubicki, (*IR*S,6*SR*)-Ethyl 4-(2,4-dichlorophenyl)-6-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2011), **E67**, o445-o446.
256. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, 5-(4-Ammonio-2-oxopyrimidine-1(2*H*)-yl)-1,3-oxathiolane-2-carboxylate

(lamivudine acid) semihydrate: The six-fold symmetry created by hydrogen bond network, *J. Chem. Cryst.* (2011), **40**, 214-218.

257. G. Dutkiewicz, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, M. Kubicki (2011) 1-Methylpiperazine-1,4-dium dipicrate, *Acta Cryst.* (2011), **E67**, o390-o391.
258. J. P. Jasinski, R. J. Butcher, S. Samshuddin, **B. Narayana**, H. S. Yathirajan (2*E*)-3-(3-Bromo-4-methoxyphenyl)-1-(pyridin-2-yl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o352-o353.
259. G. Dutkiewicz, **B. Narayana**, K. Veena, H. S. Yathirajan, M. Kubicki, (1*RS*,6*SR*)-Ethyl 4,6-bis(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2011), **E67**, o336.
260. G. Dutkiewicz, **B. Narayana**, K. Veena, H. S. Yathirajan, M. Kubicki, (1*RS*,6*SR*)-Ethyl 4-(4-chlorophenyl)-6-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate toluene hemisolvate, *Acta Cryst.* (2011), **E67**, o334-o335.
261. Z. Baktir, M. Akkurt, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 3,5-Bis(4-methoxyphenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* (2011), **E67**, o328-o329.
262. J. P. Jasinski, R. J. Butcher, B. P. Siddaraju, **B. Narayana**, H. S. Yathirajan, (2*E*)-3-[4-(Dimethylamino)phenyl]-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2011), **E67**, o313-o314.
263. G. Dutkiewicz, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, M. Kubicki, 2-Methylimidazolium picrate, *Acta Cryst.* (2011), **E67**, o235.
264. J. P. Jasinski, R. J. Butcher, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, Orphenadrinium picrate, *Acta Cryst.* (2011), **E67**, o190-o191.
265. J. P. Jasinski, R. J. Butcher, A. S. Praveen, H. S. Yathirajan, **B. Narayana**, 2-Bromo-1-(3-nitrophenyl)ethanone, *Acta Cryst.* (2011), **E67**, o29-o30.
266. S. Samshuddin, **B. Narayana**, D. N. Shetty, R. Raghavendra, An efficient synthesis of 2,4,6-triaryl pyridines and their biological evaluation, *Der Pharma Chemica* (2011), **3**, 232-240.
267. **B. Narayana**, D. N. Shetty, Development and validation of spectrophotometric method for the determination of risperidone, *Der Pharmacia Lettre* (2011), **3**, 104-109.
268. **B. Narayana**, K. Veena, A new and simple method for the spectrophotometric

- determination of risperidone, *Oxdn. Commun.* (2011), **33**, 660-665.
269. **B. Narayana**, K. Veena, A new analytical system for the spectrophotometric determination of betamethasone, *Oxdn. Commun.* (2011), **33**, 379-384.
270. **B. Narayana**, D. N. Shetty, K. Ashwini, T.V. Sreevidya , A simple method for the spectrophotometric determination of carvedilol by redox reaction, *Oxdn. Commun.* (2011), **33**, 92-97.
271. A.N. Mayekar, H.S. Yathirajan, **B. Narayana**, B.K. Sarojini, N. S. Kumari, W.T.A. Harrison , Synthesis and antimicrobial study of new 8-bromo-1,3-diaryl-2,3-dihydro-1*H*-naphtho[1,2e][1,3]oxazines, *Intern. J. Chem.* (2011), **3**, 74-86.
272. G. Dutkiewicz, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, M. Kubicki, The crystal structure of fluphenazinium dipicrate dimethylsulphoxide solvate, *J. Chem. Cryst.* (2010), **40**, 970-974.
273. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, Fluconazolium picrate, *Acta Cryst.* (2010), **E66**, o2568.
274. W. T. A. Harrison, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, (2*E*)-1-(3-Bromophenyl)-3-(6-methoxy-2-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o2552.
275. J. P. Jasinski, A. E. Pek, **B. Narayana**, H. S. Yathirajan, P. S. Nayak, 2-(4-Chlorophenyl)-6-methoxychroman-4-one, *Acta Cryst.* (2010), **E66**, o2546-o2547.
276. W.T.A. Harrison, C. S. Chidan Kumar, H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, 1-(2,5-Dichloro-3-thienyl)ethanone: Infinite sheets mediated by O...Cl halogen bonds, *Acta Cryst.* (2010), **E66**, o2480.
277. W.T.A. Harrison, C. S. Chidan Kumar, H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, (E)-1-(2,5-Dichloro-3-thienyl)-3-(3,4-dimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o2479.
278. W. T. A. Harrison, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, B. K. Sarojini , Ethyl 4-(2,4-dichlorophenyl)-6-(6-methoxy-2-naphthyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2010), **E66**, o2478.
279. W. T. A. Harrison, C. S. Chidan Kumar, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, (2*E*)-3-(1,3-Benzodioxol-5-yl)-1-(3-bromo-2-thienyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o2477.
280. J. P. Jasinski, R. J. Butcher, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, B. K.

- Sarojini, Synthesis, crystal structures and theoretical studies of four Schiff bases derived from 4-hydrazinyl-8-(trifluoromethyl)quinoline, *J. Mol Struct.* (2010), **980**, 172-181.
281. B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, S. W. Ng, E. R. T. Tiekink, (2-Methylphenyl)(phenyl)methanol, *Acta Cryst.* (2010), **E66**, o2136.
282. G. Dutkiewicz, K. Veena, **B. Narayana**, H. S. Yathirajan, M. Kubicki, (2E)-1-(4-Bromophenyl)-3-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1243-o1244.
283. H. K. Fun, M. Hemamalini, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, Bis[4-(4-chlorophenyl)-4-hydroxypiperidinium] dipicrate dimethyl sulfoxide solvate, *Acta Cryst.* (2010), **E66**, o1212-o1213.
284. J. P. Jasinski, A. E. Pek, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, 8-Bromo-1,3-diphenyl-2,3-dihydro-1H-naphtho[1,2-e][1,3]oxazine, *Acta Cryst.* (2010), **E66**, o2053-o2054.
285. J. P. Jasinski, A. N. Braley, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 4-(1H-Benzimidazol-2-ylmethoxy)-3-ethoxybenzaldehyde trihydrate, *Acta Cryst.* (2010), **E66**, o2052.
286. J. P. Jasinski, C. J. Guild, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 2,3-Dibromo-1,3-bis(4-fluorophenyl)propan-1-one, *Acta Cryst.* (2010), **E66**, o2018.
287. J. P. Jasinski, A. E. Pek, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, 4-(4-Chlorophenyl)-4-hydroxypiperidinium maleate maleic acid solvate, *Acta Cryst.* (2010), **E66**, o2012-o2013.
288. J. P. Jasinski, C. J. Guild, **B. Narayana**, P. S. Nayak, H. S. Yathirajan, (E)-3-(4-Methoxyphenyl)-1-[4-(piperidin-1-yl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1996.
289. J. P. Jasinski, A. E. Pek, **B. Narayana**, P. K. Kamath, H. S. Yathirajan, (E)-1-(4-Bromophenyl)-3-(2-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1995.
290. J. P. Jasinski, A. E. Pek, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, Opipramol dipicrate. *Acta Cryst.* (2010), **E66**, o1979-o1980.
291. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (E)-1-(2-Bromophenyl)-3-(2,5-dimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**,

- o1952.
292. J. P. Jasinski, A. E. Pek, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 1-[3,5-Bis(4-chlorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2010), **E66**, o1950-o1951.
293. J. P. Jasinski, C. J. Guild, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 3,5-Bis(4-fluorophenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* (2010), **E66**, o1948-o1949.
294. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (2*E*)-1-(2-Bromophenyl)-3-(4-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1701.
295. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (2*E*)-1-(2-Bromophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1676.
296. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan (2*E*)-1-(2-Bromophenyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1661.
297. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (2*E*)-1-(2-Bromophenyl)-3-(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1638.
298. Q. N. M. H. Al-arique, J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, Bis(2-{[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methylsulfanyl}-1*H*,3*H*⁺-benzimidazolium) 2,5-dichloro-3,6-dioxocyclohexa-1,4-diene-1,4-diolate, *Acta Cryst.* (2010), **E66**, o1507-o1508.
299. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Redetermination of 5 α -androstane-3,17-dione, *Acta Cryst.* (2010), **E66**, o1517-o1518.
300. H. Li, R. S. Rathore, K. Prakash Kamath, H. S. Yathirajan, **B. Narayana**, (2*E*)-1-(1,3-Benzodioxol-5-yl)-3-(2-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, o1289-o1290.
301. S. Samshuddin, **B. Narayana**, H. S. Yathirajan, A. P. Safwan, E. R. T. Tiekink (2010) 3,5-Bis(4-bromophenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole, *Acta Cryst.* **E66**, o1279-o1280.

302. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, K. Prakash Kamath, 2-Amino-4-methoxy-6-methylpyrimidin-1-ium picrate, *Acta Cryst.* (2010), **E66**, o1189-o1190.
303. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, K. Prakash Kamath 5,7-Dimethyl-2,3-dihydro-1*H*-1,4-diazepin-4-ium picrate, *Acta Cryst.* (2010), **E66**, o1187-o1188.
304. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, (*E*)-1-(2,5-Dichloro-3-thienyl)-3-[4-(dimethylamino)phenyl]prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, 1139.
305. G. Dutkiewicz, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, 2-(4-Methoxyphenyl)-6-(trifluoromethyl)-1*H*-pyrrolo[3,2-*c*]quinoline, *Acta Cryst.* (2010), **E66**, 1111-1112.
306. K. Veena, **B. Narayana**, Spectrophotometric determination of hydroxylamine by its oxidation to nitrite, *Oxdn. Commun.* (2010), **33**, 54-61.
307. J. P. Jasinski, R. J. Butcher, M. T. Swamy, **B. Narayana**, B. K.Sarojini, H. S. Yathirajan, Crystal structure of [4-(methylsulfanyl)phenyl]acetic acid, *J. Chem. Cryst.* (2010), **40**, 25-28.
308. G. Dutkiewicz, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, M. Kubicki (*E*)-1-(4-Methylphenyl)ethanone[8-(trifluoromethyl)quinolin-4-yl] hydrazone, *Acta Cryst.* (2010), **E66**, o874.
309. H. K. Fun, M. Hemamalini, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, Methyl 4,6-bis(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst* (2010), **E66**, o864-o865.
310. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki(2010), 3-(3-Bromo-4-methoxyphenyl)-1,5-diphenylpentane-1,5-dione, *Acta Cryst.* (2010), **E66**, o816.
311. H. K. Fun, M. Hemamalini, Divya N. Shetty, **B. Narayana**, H. S. Yathirajan, 4-(3-Carboxy-1-ethyl-6-fluoro-4-oxo-1,4-dihydro-7-quinolyl)-1-methylpiperazinium picrate, *Acta Cryst.* (2010), **E66**, o714-o715.
312. H. K. Fun, M. Hemamalini, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, Orphenadrinium picrate picric acid, *Acta Cryst.* (2010), **E66**, o682-o683.
313. J. P. Jasinski, R. J. Butcher, M. T. Swamy, H. S. Yathirajan, **B. Narayana**, 6-

- {[(Benzyloxy)carbonyl]oxy}-2-methylhexahydropyrano[3,2-d][1,3]dioxin-7,8-diyl bis(chloroacetatE), *Acta Cryst.* (2010), **E66**, o572-o573.
314. H. K. Fun, M. Hemamalini, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, 1-[3,5-Bis(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone, *Acta Cryst.* (2010), **E66**, o582-o583.
315. G. Dutkiewicz, B. P. Siddaraju, H. S. Yathirajan, **B. Narayana**, M. Kubicki, 2-Chloro-*N*-[4-chloro-2-(2-chlorobenzoyl)phenyl]acetamide, *Acta Cryst.* (2010), **E66**, o499.
316. G. Dutkiewicz, H. S. Yathirajan, Q. N. M. H. Al-Arique, **B. Narayana**, M. Kubicki, Chloranilic acid, A redetermination at 100 K, *Acta Cryst.* (2010), **E66**, o497-o498.
317. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, *N,N'*-Bis[(*E*)-2-fluorobenzylidene]-1-(2-fluorophenyl)methanedi-amine, *Acta Cryst.* (2010), **E66**, o422-o423.
318. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Imatinibium dipicrate, *Acta Cryst.* (2010), **E66**, o411-o412.
319. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 1-(1,3-Benzodioxol-5-yl)ethanone, *Acta Cryst.* (2010), **E66**, o383.
320. H. K. Fun, J. H. Goh, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, 4-Amino-*N*-(6-chloro-5-methoxypyrimidin-4-yl) benzenesulfonamide, *Acta Cryst.* (2010), **E66**, o372-o373.
321. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Trimipraminium maleate, *Acta Cryst.* (2010), **E66**, o366-o367.
322. H. K. Fun, C. S. Yeap, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, 4-(Methylsulfonyl) piperazin-1-ium chloride, *Acta Cryst.* (2010), **E66**, o361-o362.
323. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Chlorimipraminium picrate, *Acta Cryst.* (2010), **E66**, o347-o348.
324. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, *N*-(5-Amino-2-methylphenyl)-4-(3-pyridyl)pyrimidin-2-amine, *Acta Cryst.* (2010), **E66**, o349.
325. J. P. Jasinski, Q. N. M. H. Al-Arique, R. J. Butcher, H. S. Yathirajan, **B.**

- Narayana**, Dibenzo[b,e]thiepin-11(6*H*)-one, *Acta Cryst.* (2010), **E66**, o350.
326. J. P. Jasinski, R. J. Butcher, **B. Narayana**, S. Samshuddin, H. S. Yathirajan, A monoclinic polymorph of 1-(4-chlorophenyl)-3-(4-methoxyphenyl)-prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, 269-270.
327. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (2*E*)-3-(4-Bromophenyl)-1-(3-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2010), **E66**, 158.
328. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, (2*E*)-1-(3-Chlorophenyl)-3-phenylprop-2-en-1-one, *Acta Cryst.* (2010), **E66**, 157.
329. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 6,11-Dihydrodibenz[b,e]oxepin-11-one, *Acta Cryst.* (2010), **E66**, 159-160.
330. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Gabapentin-lactam.chloranilic acid (1:1), *Acta Cryst.* (2010), **E66**, 163-164.
331. J. P. Jasinski, R. J. Butcher, C. S. Chidan Kumar, **B. Narayana**, H. S. Yathirajan, 2,4-Dichloro-1-{1-[(2,4-dichlorobenzyl)oxy]ethyl}benzene, *Acta Cryst.* (2010), **E66**, 165-166.
332. J.P. Jasinski, R.J. Butcher, Q.N.M.H. Al-arique, H.S. Yathirajan, **B. Narayana**, Crystal structures and hydrogen bonding patterns in picrate salts of pharmacologically active compounds- I, *240th American Chemical Society (ACS) National Meeting.*(2010), Boston, USA, Aug 22-26, PAPER ID-17382. (Division of Medicinal Chemistry)-August 25, 2010, 7:00 pm -Boston Convention and Exposition Center, Room: Ballroom.
333. J.P. Jasinski, R.J. Butcher, H.S. Yathirajan, **B. Narayana**, K. P. Kamath, Crystal structures and hydrogen bonding patterns in picrate salts of pharmacologically active compounds-II, *240th American Chemical Society (ACS) National Meeting*, Boston, USA, Aug 22-26, PAPER ID-17410. (Division of Medicinal Chemistry)-August 25, 2010, 7:00 pm--Boston Convention and Exposition Center, Room: Ballroom
334. J.P. Jasinski, R.J. Butcher, A.N. Mayekar, H.S. Yathirajan, **B. Narayana**, Crystal structures and hydrogen bonding patterns in some Schiff bases of pharmacological importance, *240th American Chemical Society (ACS) National Meeting*, Boston, USA, Aug 22-26, PAPER ID-17437-2010. (Division of Medicinal Chemistry) - August 25, 2010, 7:00 pm -Boston Convention and Exposition Center, Room: Ballroom.

335. A.N. Mayekar, Hongqi Li, H.S Yathirajan, **B. Narayana**, N. S. Kumari, Synthesis, characterization and antimicrobial study of some new cyclohexenone derivatives, *Intern. J.Chem* (2010), **2**, 114-123.
336. **B. Narayana**, K. Ashwini, Novel reagent for the spectrophotometric determination of ranitidine hydrochloride, *Eurasian J. Anal.Chem.* (2010), **5**, 170-176.
337. **B. Narayana**, K. Ashwini, D. N. Shetty, K. Veena, Spectrophotometric determination of ranitidine hydrochloride based on the reaction with *p*-dimethylaminobenzaldehyde, *Eurasian J. Anal.Chem.* (2010), **5**, 63-72.
338. **B. Narayana**, K.K. V. Raj, B.V. Ashalatha , B.K. Sarojini ,Synthesis, characterization and anti-proliferative activity of 2-(2-bromo-5-methoxyphenyl)-6-aryl-1,3-thiazolo[3,2b][1,2,4]-triazoles, *Phosphorus, Sulfur, and Silicon* (2010), **185**,306-312.
339. A.N. Mayekar, H.S.Yathirajan, **B. Narayana**, B.K. Sarojini, N.S. Kumari, Synthesis and antimicrobial studies on new substituted 1,3,4-oxadiazole derivatives bearing 6-bromonaphthalene moiety, *Int. J. Chem.* (2010), **2**, 38-54.
340. T.V. Sreevidya, B. Narayana , H.S. Yathirajan , Synthesis, characterization of some chalcones and their cyclohexenone derivatives, *Central Eur. J. Chem.* (2010), **8**, 174-181.
341. P. Poornesh, S. Shettigar, G. Umesh, K. B. Manjunatha, K. Prakash Kamath, B. K. Sarojini, **B. Narayana**, Nonlinear optical studies on 1,3-disubstituent chalcones doped polymer films, *Optical Materials.* (2009), **31**, 854–859.
342. G. Dutkiewicz, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, M. Kubicki, (*E*)-3-(4-Chlorophenyl)-1-(1-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o3255-o3256.
343. G. Dutkiewicz, C. S. Chidan Kumar, **B. Narayana**, H. S. Yathirajan, M. Kubicki, 2-(4-Chlorophenoxy)acetohydrazide, *Acta Cryst.* (2009), **E65**, o3189.
344. J. P. Jasinski, R. J. Butcher, L. P. Suchitra, H. S. Yathirajan, **B. Narayana**, 2-Bromo-*N'*-[(2*Z*)-butan-2-ylidene]-5-methoxybenzohydrazide, *Acta Cryst.* (2009), **E65**, o2968-o2969.
345. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, (*E*)-3-(Biphenyl-4-yl)-1-(3-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o2856-o2857.
346. W. T. A. Harrison, Q. N. M. H. Al-Arique, **B. Narayana**, H. S. Yathirajan, B. K. Sarojini, 2-Bromo-1,3-bis(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2009),

- E65**, o2648.
347. J. P. Jasinski, R. J. Butcher, **B. Narayana**, K. Veena, H. S. Yathiraja, (2*E*)-1-(3-Chlorophenyl) -3-(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o2641-o2642.
348. R. Kant, S. Kohli, L. Sarmal, **B. Narayana**, S. Samshuddin, 4-(2-Chloroethyl)-morpholinium picrate, *Acta Cryst.* (2009), **E65**, o2435.
349. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 4-(4-Chlorophenyl)-1-[3-(4-fluorobenzoyl)propyl]-4-hydroxypiperidin-1-ium 2,4,6-trinitrophenolate (haloperidol picrat*E*), *Acta Cryst.* (2009), **E65**, o2403-o2404.
350. J. P. Jasinski, R.J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 3-(2-Chloroethyl)-2-methyl-4-oxo-4*H*-pyrido[1,2-*a*]pyrimidinium 2,4,6-trinitrophenolate, *Acta Cryst.* (2009), **E65**, o2201-o2202.
351. P. Poornesh, S. Shettigar, G. Umesh, K. B. Manjunatha, K. Prakash Kamath, B. K. Sarojini and **B. Narayana**, Nonlinear optical studies on 1,3-disubstituent chalcones doped polymer films, *Optical Materials.* (2009), **31**, 854–859.
352. G. Dutkiewicz, S. Samshuddin, **B. Narayana**, H. S. Yathirajan, M. Kubicki (*E*)-3-(4-Chlorophenyl)-1-(1-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o3255-o3256.
353. G. Dutkiewicz, C. S. Chidan Kumar, **B. Narayana**, H. S. Yathirajan, M. Kubicki, 2-(4-Chlorophenoxy)acetohydrazide, *Acta Cryst.* (2009), **E65**, o3189.
354. J. P. Jasinski, R. J. Butcher, L. P. Suchitra, H. S. Yathirajan, **B. Narayana**, 2-Bromo-*N*'-[(2*Z*)-butan-2-ylidene]-5-methoxybenzohydrazide, *Acta Cryst.* (2009), **E65**, o2968-o2969.
355. G. Dutkiewicz, C. S. Chidan Kumar, H. S. Yathirajan, **B. Narayana**, M. Kubicki, (*E*)-3-(Biphenyl-4-yl)-1-(3-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o2856-o2857.
356. W. T. A. Harrison, Q. N. M. H. Al-Arique, **B. Narayana**, H. S. Yathirajan, B. K. Sarojini, 2-Bromo-1,3-bis(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o2648.
357. J. P. Jasinski, R. J. Butcher, **B. Narayana**, K. Veena, H. S. Yathiraja, (2*E*)-1-(3-Chlorophenyl)-3-(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**,

o2641-o2642.

358. R. Kant, S. Kohli, L. Sarmal, **B. Narayana**, S. Samshuddin, 4-(2-Chloroethyl)-morpholinium picrate, *Acta Cryst.* (2009), **E65**, o2435.
359. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 4-(4-Chlorophenyl)-1-[3-(4-fluorobenzoyl)propyl]-4-hydroxypiperidin-1-ium 2,4,6-trinitrophenolate (haloperidol picrate), *Acta Cryst.* (2009), **E65**, o2403-o2404.
360. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 3-(2-Chloroethyl)-2-methyl-4-oxo-4*H*-pyrido[1,2-*a*]pyrimidinium 2,4,6-trinitrophenolate, *Acta Cryst.* (2009), **E65**, o2201-o2202.
361. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, L. Mallesha, K. N. Mohana, **B. Narayana**, Crystal structure of abacavir hemisulfate: A nucleoside analog reverse transcriptase inhibitor, *J. Chem. Cryst.* (2009), **39**, 864-869.
362. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, 3-(2-Chloroethyl)-2-methyl-4*H*-pyrido[1,2-*a*]pyrimidin-4-one, *Acta Cryst.* (2009), **E65**, o1987-o1988.
363. J. P. Jasinski, R. J. Butcher, K. Veena, **B. Narayana**, H. S. Yathirajan, A second polymorph of (2*E*)-1-(4-fluorophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o1965-o1966.
364. H. Li, K. P. Kamath, **B. Narayana**, H. S. Yathirajan, W. T. A. Harrison, (2*E*)-3-(3-Bromophenyl)-1-(4-chlorophenyl)prop-2-en-1-one, a non-merohedral twin, *Acta Cryst.* (2009), **E65**, o1915.
365. H. Li, B. K. Sarojini, **B. Narayana**, H. S. Yathirajan, W. T. A. Harrison, 2-Bromo-*N'*-[(*Z*)-2-bromobenzylidene]-5-methoxybenzohydrazide, *Acta Cryst.* (2009), **E65**, o1750.
366. J. P. Jasinski, R. J. Butcher, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, Propiverinium picrate, *Acta Cryst.* (2009), **E65**, o1738-o1739.
367. J. P. Jasinski, R. J. Butcher, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, B. K. Sarojini, Synthesis and crystal structure of 5-[2-(6-bromonaphthalenyloxymethyl)]-3-(4-morpholinomethyl)-1,3,4-oxadiazole-2(3*H*)-thione, *J. Chem. Cryst.* (2009), **39**, 761-765.
368. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, L. Mallesha, K. N. Mohana and B.

- Narayana, Crystal structure of a second polymorph of gabapentin hydrochloride hemihydrate with a three-center bifurcated hydrogen bond, *J. Chem. Cryst.* (2009), **39**, 777-780.
369. J. P. Jasinski, R. J. Butcher, L. Mallesha, K. N. Mohana, H. S. Yathirajan and **B. Narayana**, Dual chlorine-bifurcated acceptor $\text{Cl}\cdots\text{H}-(\text{N},\text{O})$ hydrogen bonds in 4-[(4-methylpiperazin-1-yl) methyl]benzoic acid dihydrochloride hemihydrates, *J. Chem. Cryst.* (2009), **39**, 773-776.
370. J. P. Jasinski, R. J. Butcher, L. Mallesha, K. N. Mohana, H. S. Yathirajan, **B. Narayana**, Crystal structure of 2',3'-di-*O*-acetyl-5'-deoxy-5-fluorocytidine with $\text{N}-\text{H}\cdots(\text{O},\text{F})$ proton donor bifurcated and $(\text{C},\text{N})-\text{H}\cdots\text{O}$ bifurcated acceptor dual three-center hydrogen bond configurations, *J. Chem. Cryst.* (2009), **39**, 433-437.
371. J. P. Jasinski, R. J. Butcher, L. Mallesha, K.N. Mohana, H.S. Yathirajan, **B. Narayana** (2009) Crystal structure of 3-oxo-4-aza-5- α -androstane-17 β - *tert*-butyl carboxamide with an $\text{O}\cdots\text{H}-(\text{C}, \text{N})$ acceptor four-center hydrogen bond, *J. Chem. Cryst.* (2009), **39**, 458-465.
372. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, L. Mallesha, K. N. Mohana, Intermolecularly associated carboxylic acid dimers in the supramolecular assembly of (R)-1,4-benzodioxane 2-carboxylic acid, *J.Chem. Cryst.* (2009), **39**, 453-457.
373. H. Li, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, W. T. A. Harrison, (\pm)-Ethyl 6-(6-methoxy-2-naphthyl)-4-(4-methylphenyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2009), **E65**, o1186.
374. H. Li, H.S. Yathirajan, L. Mallesha, K.N. Mohana, **B. Narayana**, Gabapentinium picrate, *Acta Cryst.* (2009), **E65**, o783.
375. R. Kant, Kamni, **B. Narayana**, K. Veena, H. S. Yathirajan, (*E*)-3-(4-Bromophenyl)-1-(3,4-dichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2009), **E65**, o836.
376. H. Li, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, W. T. A. Harrison, Ethyl 6-(6-methoxy-2-naphthyl)-2-oxo-4-(2-thienyl)cyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2009), **E65**, o1533.
377. Hong qi Li, Q. N. M. H. Al-Arique, H. S. Yathirajan, **B. Narayana**, A. R. Ramesh, 4-(4-Carboxybenzyl)-1-methylpiperazin-1-ium picrate, *Acta Cryst.* (2009), **E65**, o518.

378. J. P. Jasinski, R. J. Butcher, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, Structures of three chalcones derived from 6-methoxy-2-naphthaldehyde, *J. Chem. Cryst.* (2009), **39**, 157-162.
379. **B. Narayana**, K. Sunil, A spectrophotometric method for the determination of nitrite and nitrate, *Eurasian J. Anal. Chem.* (2009), **4**, 204-214.
380. J.P. Jasinski, R.J. Butcher, H.S. Yathirajan, **B. Narayana**, L. Mallesha, K.N. Mohana, Intermolecularly associated carboxylic acid dimers in the supramolecular assembly of 1,4-benzodioxane 2-carboxylic acid, *238th American Chemical Society (ACS) National Meeting* (2009), Washington, DC, USA, Aug 16-20, INORG 137
381. J.P. Jasinski, R.J. Butcher, A.N. Mayekar, H.S. Yathirajan , **B. Narayana**, Structures of three chalcones derived from 6-methoxy-2-naphthaldehyde, *238th American Chemical Society (ACS) National Meeting* (2009), Washington, DC, USA, Aug 16-20, INORG 138.
382. J.P. Jasinski, R.J. Butcher, L. Mallesha, K.N. Mohana, H.S. Yathirajan, **B. Narayana** ,Unique hydrogen bonding effects in biomolecules, *238th American Chemical Society (ACS) National Meeting* (2009), Washington, DC, USA, Aug 16-20, INOR 486
383. J.P. Jasinski, R.J. Butcher, L. Mallesha, K.N. Mohana, H.S. Yathirajan , **B. Narayana** , Unusual hydrogen bonding effects in biomolecules, *238th American Chemical Society (ACS) National Meeting* (2009), Washington, DC, USA, Aug 16-20, INOR 487.
384. B.V. Ashalatha, **B. Narayana**, K.K. V. Raj , Synthesis and characterization of some novel 3-bromo-2-acetylthiophene chalcones and biological evaluation of their ethyl-4-(3-bromothien-2-yl)-2-oxo-6-(aryl)cyclohex-3-ene-1-carboxylate derivatives, *Phosphorus, Sulfur, and Silicon* (2009), **184**, 1904 -1919.
385. K. Sunil, **B. Narayana**, Spectrophotometric method for the determination of dissolved oxygen in water samples, *Oxdn. Commun.* (2009), **32**, 261-266
386. K.Sunil, B. Narayana, Facile and sensitive spectrophotometric method for the determination of vanadium, *Eurasian J.Anal.Chem.* (2009), **4**, 141-151.
387. T.V. Sreevidya, B. Narayana, A simple and rapid spectrophotometric method for the determination of artesunate in pharmaceuticals, *Eurasian J.Anal.Chem.* (2009), **4**, 119-126
388. T.V. Sreevidya, **B. Narayana**, Spectrophotometric methods for the determination of arteether and artemether, *Oxdn. Commun.* (2008), **31**, 904-911.
389. A. Fischer, M. T. Swamy, **B. Narayana**, H. S. Yathirajan, rac-Ethyl 3-(3-bromo-2-thienyl)-2-oxo-6-(4-propoxyphenyl)cyclohex-3-ene-1-carboxylate, *Acta Cryst.*

- (2008), **E64**, o2152.
390. Hongqi Li, T. V. Sreevidya, **B. Narayana**, B. K. Sarojini, H. S. Yathirajan, (*E*)-1-(1,3-Benzodioxol-5-yl)-3-(3-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2008), **E64**, o2387.
391. J. P. Jasinski, R. J. Butcher, M. T. Swamy, H. S. Yathirajan, K. N. Mohana, **B. Narayana**, Crystal structure of methyl 2-(benzyloxy) benzoate, *Analytical Sciences: X-ray Structure Analysis Online.* (2008), **24**, x273-x274.
392. J. P. Jasinski, R. J. Butcher, T. V. Sreevidya, H. S. Yathirajan, **B. Narayana**, Structures of two chalcones derived from 1-(1,3-benzodioxol-5-yl)ethanone, *Analytical Sciences: X-ray Structure Analysis Online.* (2008), **24**, x245-x246.
393. J. P. Jasinski, R. J. Butcher, P. Karegoudar, B. S. Holla, H. S. Yathirajan and **B. Narayana**, Crystal structure of 5-amino-1-(2,4,6-trichlorophenyl)-1*H*-pyrazole-4-carbonitrile, *Analytical Sciences: X-ray Structure Analysis Online.* (2008), **24**, x207-x208.
394. J. P. Jasinski, R. J. Butcher, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, Crystal structure of (\pm)-5-benzoyl-2,3-dihydro-1*H*-pyrazoline-1-carboxylic acid or Ketorolac, *Analytical Sciences: X-ray Structure Analysis Online.* (2008), **24**, x205-x206.
395. **B. Narayana**, B. K. Sarojini, K. Prakash Kamath, H. S. Yathirajan, M. Bolte, 2-Aminopyrimidinium picrate, *Acta Cryst.* (2008), **E64**, o117-o118.
396. Seetharam Shettigar, G. Umesh, K. Chandrasekharan, B. K. Sarojini, **B. Narayana**, Studies on third-order nonlinear optical properties of chalcone derivatives in polymer host, *Optical Materials.* (2008), **30**, 1297–1303.
397. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, Ethyl 4-(3-bromo-2-thienyl)-2-oxo-6-phenylcyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2008), **E64**, o560.
398. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, T. V. Sreevidya, A second polymorph of β -arteether, *Acta Cryst.* (2008), **E64**, o585-o586.
399. J. P. Jasinski, R. J. Butcher, **B. Narayana**, K. Sunil, H. S. Yathirajan, Bis{4-[(*Z*)-*N'*-(4-hydroxybenzylidene)*E*hydrazino]-8-(trifluoromethyl)quinolinium} sulfate dehydrate, *Acta Cryst.* (2008), **E64**, o481-o482.
400. J. P. Jasinski, R. J. Butcher, **B. Narayana**, K. Lakshmana, H. S. Yathirajan, (*2E*)-3-

- (4-Methylphenyl)-1-(3-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2008), **E64**, o1-o2.
401. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, T. V. Sreevidya, Redetermination of dihydroartemisinin at 103 (2) K, *Acta Cryst.* (2008), **E64**, o89-o90.
402. H. S. Yathirajan, **B. Narayana**, M. T. Swamy, B. K. Sarojini, M. Bolte Phthalazin-1(2H)-one-picric acid (1/1), *Acta Cryst.* (2008), **E64**, o119.
403. M. T. Swamy, **B. Narayana**, H. S. Yathirajan, B. K. Sarojini, M. Kubicki, 3-[(Z)-(4-Diethylamino-6-oxocyclohexa-2,4-dien-1-ylidene)methylamino]benzoic acid, *Acta Cryst.* (2008), **E64**, o163-o164.
404. J. P. Jasinski, R. J. Butcher, **B. Narayana**, M. T. Swamy and H. S. Yathirajan, Redetermination of 4-hydroxybenzaldehyde, *Acta Cryst.* (2008), **E64**, o187.
405. K. Veena, **B. Narayana**, A new facile and sensitive method for the spectrophotometric determination of chromium, *Eurasian J. Anal. Chem.* (2008), **3**, 324-334.
406. K. Sunil, **B. Narayana**, Facile and sensitive spectrophotometric determination of chromium, *Anal. Lett.* (2008), **42**, 2374-2382.
407. K. Sunil, **B. Narayana**, Spectrophotometric determination of hydrogen peroxide in water and cream samples, *Bull. Environ. Cont. Toxicol.* (2008), **81**, 422-426.
408. C. Pasha, **B. Narayana**, Determination of arsenic in environmental and biological samples using toluidine blue or safranin O by simple spectrophotometric method, *Bull. Environ. Cont. Toxicol.* (2008), **81**, 47-51.
409. C. Pasha, **B. Narayana**, A simple method for the spectrophotometric determination of cephalosporins in pharmaceuticals using variamine blue, *Ecl. Quim.* (2008), **33**, 41-46.
410. C. Pasha, **B. Narayana**, Spectrophotometric determination of endosulfan using thionin and methylene blue as chromogenic reagents, *Bull. Environ. Cont. Toxicol.* (2008), **80**, 85-89.
411. M. T. Swamy, M. A. Ashok, H. S. Yathirajan, **B. Narayana** and M. Bolte, Desipraminium picrate, *Acta Cryst.* (2007), **E63**, o4919.
412. W. T. A. Harrison, M. T. Swamy, H. S. Yathirajan, M. A. Ashok and **B. Narayana**, Diethylammonium 2,5-dihydroxybenzenesulfonate, *Acta Cryst.* (2007), **E63**, o4870.

413. **B. Narayana**, K. Sunil, B. K. Sarojini, H. S. Yathirajan, M. Bolte, (1*Z*)-1-(4-Methoxyphenyl)ethan-1-one thiosemicarbazone, *Acta Cryst.* (2007), **E63**, o4834-o4835.
414. J. P. Jasinski, R. J. Butcher, H. S. Yathirajan, **B. Narayana**, M. T. Swamy, 3-(2-Chlorophenyl)-1,5-bis(4-chlorophenyl)pentane-1,5-dione, *Acta Cryst.* (2007), **E63**, o4808-o4809.
415. B. K. Sarojini, **B. Narayana**, K. Mustafa, H. S. Yathirajan, M. Bolte, 5-Diethylamino-2-[(*Z*)-(4-methyl-3-nitrophenyl)iminomethyl]phenol, *Acta Cryst.* (2007), **E63**, o4782.
416. B. K. Sarojini, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, M. Bolte, 6-Bromo-2,4-bis(3-methoxyphenyl)-3,4-dihydro-2*H*-1,3-naphthoxazine, *Acta Cryst.* (2007), **E63**, o4739.
417. J. P. Jasinski, R. J. Butcher, K. Lakshmana, **B. Narayana**, H. S. Yathirajan, (2*E*)-3-(2-Chlorophenyl)-1-phenylprop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4715.
418. **B. Narayana**, D. J. Prasad, B. K. Sarojini, H. S. Yathirajan, M. Bolte, 3-[4-(Methylsulfanyl)benzyl]-4-[(1*E*)-[4-(methylsulfanyl)phenyl]methyleneamino]-4,5-dihydro-1*H*-1,2,4-triazole-5-thione, *Acta Cryst.* (2007), **E63**, o4705-o4706.
419. B. K. Sarojini, H. S. Yathirajan, **B. Narayana**, M. T. Swamy, M. Kubicki, (2*E*)-3-(4-Methoxyphenyl)-1-(3-methyl-2-thienyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4688.
420. J. P. Jasinski, R. J. Butcher, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, 2-[(*Z*)-(2,5-Dichlorophenyl)iminomethyl]-5-(diethylamino)phenol, *Acta Cryst.* (2007), **E63**, o4592-o4593.
421. J. P. Jasinski, R. J. Butcher, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, 5-(Diethylamino)-2-[(*Z*)-(1-naphthylimino)methyl]phenol, *Acta Cryst.* (2007), **E63**, o4588-o4589.
422. J. P. Jasinski, R. J. Butcher, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, (6*Z*)-3-Diethylamino-6-(3-hydroxyanilinomethylen*E*)cyclohexa-2,4-dien-1-one, *Acta Cryst.* (2007), **E63**, o4566-o4567.
423. B. K. Sarojini, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, M. Bolte, 2-Amino-4,5-dimethoxybenzotrile, *Acta Cryst.* (2007), **E63**, o4553.
424. **B. Narayana**, K. Lakshmana, B. K. Sarojini, H. S. Yathirajan, M. Bolte, (2*E*)-3-

- (5-Bromo-2-thienyl)-1-(4-hydroxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4552.
425. B. K. Sarojini, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, M. Bolte, A 1:1 cocrystal of 2,8-bis(trifluoromethyl)quinolin-4-ol and 2,8-bis(trifluoromethyl)quinolin-4(1*H*)-one, *Acta Cryst.* (2007), **E63**, o4478-o4479.
426. B. K. Sarojini, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, M. Bolte, Ethyl (6-bromo-2-naphthyloxy)acetate, *Acta Cryst.* (2007), **E63**, o4447.
427. **B. Narayana**, K. Mustafa, B. K. Sarojini, H. S. Yathirajan, M. Bolte, (2*E*)-1-(2-Thienyl)-3-(2,3,5-trichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4422-o4423.
428. **B. Narayana**, K. Sunil, B. K. Sarojini, H. S. Yathirajan, M. Bolte, 4-[1-(4-Chlorophenyl)-3-oxobutylamino]benzoic acid, *Acta Cryst.* (2007), **E63**, o4420-o4421.
429. B. K. Sarojini, K. Mustafa, **B. Narayana**, H. S. Yathirajan, M. Bolte, 2-Bromo-5-methoxybenzohydrazide, *Acta Cryst.* (2007), **E63**, o4419.
430. **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, B. K. Sarojini, M. Kubicki, 2,3-Dibromo-3-(5-bromo-2-methoxyphenyl)-1-(2,4-dichlorophenyl)propan-1-one, *Acta Cryst.* (2007), **E63**, o4362.
431. R. J. Butcher, J. P. Jasinski, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, (2*Z*)-2-Bromo-3-[3,5-dibromo-4-(ethylamino)phenyl]-1-(2,4-dichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4308-o4309.
432. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, **B. Narayana** and A. N. Mayekar, (2*E*)-3-(2-Bromo-5-methoxyphenyl)-1-(2,4-dichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4253- o4254.
433. J. P. Jasinski, R. J. Butcher, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, (2*E*)-1-(2,4-Dichlorophenyl)-3-[4-(diethylamino)-2-hydroxyphenyl]prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4231-o4232.
434. J. P. Jasinski, R. J. Butcher, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, (2*E*)-3-(3,5-Dichloro-4-methoxy-2,6-dimethylphenyl)-1-(2,4-dichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o4229-o4230.
435. W. T. A. Harrison, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, H. S. Yathirajan, (2*E*)-1-(3-Bromo-2-thienyl)-3-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007),

E63, o4183.

436. B. K. Sarojini, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, M. Bolte, 5-Bromo-3-(methylaminocarbonyl)pyridinium picrate, *Acta Cryst.* (2007), **E63**, o4181.
437. M. Odabasoglu, O. Büyükgüngör, K. Sunil, **B. Narayana**, 4-Fluorobenzaldehyde [(*E*)-4-fluorobenzylidene]hydrazone, *Acta Cryst.* (2007), **E63**, o4145-o4146.
438. M. Odabasoglu, O. Büyükgüngör, B. K. Sarojini, **B. Narayana**, 3-{[2-(Trifluoromethyl)phenyl]hydrazono}pentane-2,4-dione, *Acta Cryst.* (2007), **E63**, o4135-o4136.
439. R. J. Butcher, J. P. Jasinski, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, 3-Bromo-1-(2,4-dichlorophenyl)-2-methoxy-3-(4-methoxyphenyl)propan-1-one-2-bromo-3-(3-chloro-4-methoxyphenyl)-1-(4-chlorophenyl)-3-methoxypropan-1-one (0.91/0.09), *Acta Cryst.* (2007), **E63**, o4123-o4124.
440. R. J. Butcher, J. P. Jasinski, A. N. Mayekar, **B. Narayana**, H. S. Yathirajan, (*2E*)-1-(2,4-Dichlorophenyl)-3-(2,3,4-trimethoxyphenyl)prop-2-en-1-one. *Acta Cryst.* (2007), **E63**, o4059- o4060.
441. R. J. Butcher, J. P. Jasinski, **B. Narayana**, K. Sunil, H. S. Yathirajan, 2-(4-Chlorophenyl)-3- {[(*E*)-(4-chlorophenyl)methylene]amino}-2,3-dihydroquinazolin-4(*1H*)-one, *Acta Cryst.* (2007), **E63**, o4025-o4026.
442. R. J. Butcher, J. P. Jasinski, D. J . Prasad, **B. Narayana**, H. S. Yathirajan, 3-(4-Methylphenyl)-5-[4-(methylthio)phenyl]-4,5-dihydro-1*H*-pyrazole-1-carbaldehyde. *Acta Cryst.* (2007), **E63**, o4005-o4006.
443. B. K. Sarojini, **B. Narayana**, K. Sunil, H. S. Yathirajan, M. Bolte, 2-Bromo-*N*-[(*E*)-4-hydroxybenzylidene]-5-methoxybenzohydrazide, *Acta Cryst.* (2007), **E63**, o3862-o3863.
444. B. K. Sarojini, **B. Narayana**, K. Veena, H. S. Yathirajan, M. Bolte, 1-(2-Bromo-5-methoxybenzoyl) thiosemicarbazide, *Acta Cryst.* (2007), **E63**, o3844-o3845.
445. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, **B. Narayana**, K. Veena, (*E*)-3-(4-Fluorophenyl)-1-(4-methylphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3833.
446. B. K. Sarojini, **B. Narayana**, H. S. Yathirajan, A. N. Mayekar, M. Bolte, 2,3-Dibromo-3-(4-bromo-6-methoxy-2-naphthyl)-1-(4-methoxyphenyl) propan-1-one, *Acta Cryst.* (2007), **E63**, o3755.

447. B.K. Sarojini, **B. Narayana**, K. Sunil, H.S. Yathirajan, M. Bolte, 1-(2,6-Dimethylphenyl) thiourea. *Acta Cryst.* (2007), **E63**, o3754.
448. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, **B. Narayana**, A. Mithun, (2*E*)-1-(4-Bromophenyl)-3-[4-(methylsulfonyl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3731-o3732.
449. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, A. M. Vijesh, **B. Narayana**, 2- $\{(E)-[(2\text{-Chloro-5-nitrophenyl})\text{imino}]\text{methyl}\}$ -5-(diethylamino)phenol, *Acta Cryst.* (2007), **E63**, o3748.
450. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, (2*E*)-1-(3-Bromothiophen-2-yl)-3-phenylprop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3705-o3706.
451. B. K. Sarojini, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, M. Bolte, Redetermination of *N,N'*-bis(4-chlorophenyl)thiourea at 173 K, *Acta Cryst.* (2007), **E63**, o3879.
452. W. T. A. Harrison, T. V. Sreevidya, **B. Narayana**, B. K. Sarojini, H. S. Yathirajan, Nevirapinium picrate, *Acta Cryst.* (2007), **E63**, o3871.
453. W. T. A. Harrison, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, H. S. Yathirajan, (2*E*)-3-(Biphenyl-4-yl)-1-(3-bromo-2-thienyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3898.
454. W. T. A. Harrison, M. T. Swamy, P. Nagaraja, H. S. Yathirajan, **B. Narayana**, Desipraminium picrate monohydrate, *Acta Cryst.* (2007), **E63**, o3892.
455. R. J. Butcher, J. P. Jasinski, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, 2-{5-Chloro-2-[(4-methoxybenzyl)amino]phenyl}-4-cyclopropyl-1,1,1-trifluorobut-3-yn-2-ol, *Acta Cryst.* (2007), **E63**, o3703-o3704.
456. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, K. Veena, **B. Narayana**, (2*E*)-1-(4-Methylphenyl)-3-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3680.
457. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, A. M. Vijesh, **B. Narayana**, 4-Methoxybenzaldehyde (phthalazin-1-ylidene)hydrazone, *Acta Cryst.* (2007), **E63**, o3674.
458. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, K. Lakshmana, **B. Narayana**, (2*E*)-3-(4-Chlorophenyl)-1-(3-hydroxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**,

- o3661.
459. R. J. Butcher, J. P. Jasinski, **B. Narayana**, K. Lakshmana, H. S. Yathirajan, (2*E*)-1-(3-Hydroxyphenyl)-3-(4-methylphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3660.
460. B. K. Sarojini, **B. Narayana**, A. M. Vijesh, H. S. Yathirajan, M. Bolte, (2*E*)-1-(3-Methyl-2-thienyl)-3-(3-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3656.
461. R. J. Butcher, J. P. Jasinski, **B. Narayana**, K. Sunil, H. S. Yathirajan, 2-Bromo-*N*-[(*E*)-4-chlorobenzylidene]-5-methoxybenzohydrazide, *Acta Cryst.* (2007), **E63**, o3652.
462. A. Fischer, H. S. Yathirajan, B.V. Ashalatha, **B. Narayana**, B. K. Sarojini, (7*RS*,8*SR*)-Ethyl-6-(1,3-benzodioxol-5-yl)-3-(3-bromo-2-thienyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2007), **E63**, o3616.
463. R. J. Butcher, J. P. Jasinski, **B. Narayana**, M. T. Swamy, H. S. Yathirajan, 1-(4-{[8-(Trifluoromethyl)quinolin-4-yl]amino}phenyl)ethanone, *Acta Cryst.* (2007), **E63**, o3604.
464. R. J. Butcher, J. P. Jasinski, A. N. Mayekar, H. S. Yathirajan, **B. Narayana**, 1-(Quinolin-2-yl)ethanone, *Acta Cryst.* (2007), **E63**, o3603.
465. R. J. Butcher, J. P. Jasinski, **B. Narayana**, K. Lakshmana, H. S. Yathirajan, (2*E*)-3-(4-Fluorophenyl)-1-(3-hydroxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3586.
466. R. J. Butcher, J. P. Jasinski, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, 2,4-Diacetylquinoline, *Acta Cryst.* (2007), **E63**, o3557.
467. B. K. Sarojini, **B. Narayana**, K. Sunil, H. S. Yathirajan, M. Bolte, *N*'-Isopropylidene-6-methoxy-2-naphthohydrazide, *Acta Cryst.* (2007), **E63**, o3551.
468. R. J. Butcher, J. P. Jasinski, **B. Narayana**, A. N. Mayekar, H. S. Yathirajan, (2*E*)-3-(Biphenyl-4-yl)-1-(quinolin-2-yl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3546.
469. A. Fischer, H. S. Yathirajan, B. K. Sarojini, S. Bindya, **B. Narayana**, 1-(4-Methoxyphenyl)-5-phenylpenta-2,4-dien-1-one, *Acta Cryst.* (2007), **E63**, o3540.
470. **B. Narayana**, B.P. Siddaraju, C.R. Raju, H.S. Yathirajan, M. Bolte (2007) 2-

- Bromo-5-methoxy-N'-[(E)-(4-nitrophenyl)methylene]benzohydrazide, *Acta Cryst.* E63: o3522.
471. B. K. Sarojini, H. S. Yathirajan, **B. Narayana**, K. Sunil, M. Bolte, 1,5-Bis[(1E)-3,4-dimethoxybenzylidene]thiocarbonohydrazide tetrahydrate, *Acta Cryst.* (2007), **E63**, o3521.
472. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, Methyl 5-bromo-1*H*-indole-2-carboxylate, *Acta Cryst.* (2007), **E63**, o3505.
473. B. K. Sarojini, H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, M. Bolte, (2E)-1-(2,4-Dichlorophenyl)-3-(quinolin-8-yl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3488.
474. B. K. Sarojini, H. S. Yathirajan, K. Sunil, **B. Narayana**, M. Bolte, 2-Bromo-N'-isopropylidene-5-methoxybenzohydrazide, *Acta Cryst.* (2007), **E63**, o3487.
475. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, M. T. Swamy, **B. Narayana**, (2,3-Dimethylphenoxy)acetic acid, *Acta Cryst.* (2007), **E63**, o3472.
476. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, **B. Narayana**, Samshad, 7-Hydroxy-4-methyl-2*H*-chromen-2-one monohydrate, *Acta Cryst.* (2007), **E63**, o3412-o3413.
477. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, S. Bindya, **B. Narayana**, 1,5-Bis(3-bromothien-2-yl)-3-(2,3,5-trichlorophenyl)pentane-1,5-dione, *Acta Cryst.* (2007), **E63**, o3330.
478. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, S. Bindya, **B. Narayana**, α -Artemether, *Acta Cryst.* (2007), **E63**, o3291-o3292.
479. R. J. Butcher, J. P. Jasinski, **B. Narayana**, B. K. Sarojini, S. Bindya, H. S. Yathirajan, 2,5-Bis(3,4-dimethoxybenzylidene)cyclopentanone, *Acta Cryst.* (2007), **E63**, o3270-o3271.
480. W. T. A. Harrison, H. S. Yathirajan, **B. Narayana**, T. V. Sreevidya, B. K. Sarojini, Redetermination of α -D-glucosamine hydrochloride: elucidation of the hydrogen-bonding scheme, *Acta Cryst.* (2007), **E63**, o3248.
481. R. J. Butcher, J. P. Jasinski, B. K. Sarojini, H. S. Yathirajan, S. Bindya, **B. Narayana**, 1,5-Bis(4-fluorophenyl)penta-1,4-dien-3-one, *Acta Cryst.* (2007), **E63**, o3213-o3214.
482. B. K. Sarojini, H. S. Yathirajan, K. Lakshmana, **B. Narayana**, M. Bolte, (2E)-3-(2-

- Chlorophenyl)-1-(3-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o3211.
483. M. Odabasoglu, O. Büyükgüngör, **B. Narayana**, A. M. Vijesh, H. S. Yathirajan, 5-Methoxy-1*H*-benzo[d]imidazole-2(3*H*)-thione, *Acta Cryst.* (2007), **E63**, o3199-o3200.
484. O. Büyükgüngör, M. Odabasoglu, **B. Narayana**, A. M. Vijesh, H. S. Yathirajan, Phthalazin-1(2*H*)-one, *Acta Cryst.* (2007), **E63**, o3198.
485. W. T. A. Harrison, S. Bindya, M. A. Ashok, H. S. Yathirajan, **B. Narayana**, Imipraminium picrate, *Acta Cryst.* (2007), **E63**, o3143.
486. W. T. A. Harrison, B. K. Sarojini, S. Bindya, **B. Narayana**, H. S. Yathirajan, (1*E*)-5-Amino-1,5-bis[4-(methylsulfanyl)phenyl]pent-1-en-3-one, *Acta Cryst.* (2007), **E63**, o3142.
487. R. J. Butcher, J. P. Jasinski, H. S. Yathirajan, S. Bindya, **B. Narayana**, B. K. Sarojini, 1,5-Bis(3,4-dimethoxyphenyl)penta-1,4-dien-3-one, *Acta Cryst.* (2007), **E63**, o3115.
488. H. S. Yathirajan, S. Bindya, B. K. Sarojini, **B. Narayana**, M. Bolte, Ethyl 2-(propionylamino)-4,5,6,7-tetrahydro-1-benzothiophene-3-carboxylate, *Acta Cryst.* (2007), **E63**, o2949.
489. **B. Narayana**, K. Sunil, H. S. Yathirajan, B. K. Sarojini, M. Bolte, 2-Bromo-*N'*-[(*E*)-(4-fluorophenyl)methylene]-5-methoxybenzohydrazide monohydrate, *Acta Cryst.* (2007), **E63**, o2948.
490. B. K. Sarojini, **B. Narayana**, S. Bindya, H. S. Yathirajan, M. Bolte, 4-(Methylsulfanyl)benzaldehyde semicarbazone, *Acta Cryst.* (2007), **E63**, o2946.
491. B. K. Sarojini, H. S. Yathirajan, T. V. Sreevidya, **B. Narayana**, M. Bolte, 3-(Biphenyl-4-yl)-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o2945.
492. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, 4,8-Dihydroxy-2-methyl-1,2,3,4-tetrahydroisoquinolinium chloride monohydrate, *Acta Cryst.* (2007), **E63**, o2885.
493. A. Fischer, H. S. Yathirajan, B. K. Sarojini, S. Bindya, **B. Narayana**, 1-(4-Methylphenyl)-5-phenylpenta-2,4-dien-1-one, *Acta Cryst.* (2007), **E63**, o2832.
494. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, K. Sunil, M. Bolte, Bis{4-[(2-

- hydroxybenzylidene]hydrazino]-8-(trifluoromethyl)quinolinium} sulfate tetrahydrate, *Acta Cryst.* (2007), **E63**, o2720-o2721.
495. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, K. Sunil, M. Bolte, 2-Bromo-5-methoxy-*N'*-[(*E*)-(2-nitrophenyl)methylene]benzohydrazide, *Acta Cryst.* (2007), **E63**, o2719.
496. H. S. Yathirajan, S. Bindya, B. K. Sarojini, **B. Narayana**, M. Bolte, Ethyl (4-oxo-1-phenyl-1,4-dihydro-5*H*-pyrazolo[3,4-*d*]pyrimidin-5-yl)acetate, *Acta Cryst.* (2007), **E63**, o2718.
497. H. S. Yathirajan, S. Bindya, B. K. Sarojini, **B. Narayana**, M. Bolte, Methyl (4-oxo-1-phenyl-4,5-dihydro-1*H*-pyrazolo[3,4-*d*]pyrimidin-5-yl)acetate, *Acta Cryst.* (2007), **E63**, o2566.
498. H. S. Yathirajan, **B. Narayana**, K. Sunil, B. K. Sarojini, M. Bolte, *N'*-[(1*E*)-(4-Fluorophenyl)methylene]-6-methoxy-2-naphthohydrazide, *Acta Cryst.* (2007), **E63**, o2565.
499. H. S. Yathirajan, S. Bindya, B. K. Sarojini, **B. Narayana**, M. Bolte, Ethyl 6-methoxy-2-naphthoate, *Acta Cryst.* (2007), **E63**, o2350.
500. H. S. Yathirajan, S. Bindya, M. A. Ashok, **B. Narayana**, M. Bolte, 1,3-Benzodioxol-5-ylmethanol, *Acta Cryst.* (2007), **E63**, o2349.
501. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, 2,3-Dibromo-3-(5-bromo-6-methoxy-2-naphthyl)-1-(2,4-dichlorophenyl)propan-1-one, *Acta Cryst.* (2007), **E63**, o2345.
502. H. S. Yathirajan, S. Bindya, M. A. Ashok, **B. Narayana**, M. Bolte, *N*-(2-Nitro-4-propoxyphenyl)acetamide, *Acta Cryst.* (2007), **E63**, o2202-o2203.
503. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, (2*E*)-1-(2,4-Dichlorophenyl)-3-(4,5-dimethoxy-2-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o2200-o2201.
504. H. S. Yathirajan, A. M. Vijesh, **B. Narayana**, B. K. Sarojini, M. Bolte, 2,3-Dibromo-1-(3-bromo-2-thienyl)-3-(4-fluorophenyl)propan-1-one, *Acta Cryst.* (2007), **E63**, o2198- o2199.
505. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, 2,3-Dibromo-1-(2,4-dichlorophenyl)-3-(4,5-dimethoxy-2-nitrophenyl)propan-1-one, *Acta Cryst.* (2007), **E63**, o2196-o2197.

506. O. Büyükgüngör, M. Odabasoglu, **B. Narayana**, A. M. Vijesh, H. S. Yathirajan, (*E*)-2-Hydroxy-5-methyl-3-[(4-methyl-2-pyridyl)iminomethyl]benzaldehyde, *Acta Cryst.* (2007), **E63**, o1996- o1998.
507. M. Odabasoglu, O. Büyükgüngör, **B. Narayana**, A. M. Vijesh, H. S. Yathirajan, (*E*)-2-Hydroxy-5-methyl-3-[(2-pyridylimino)methyl]benzaldehyde, *Acta Cryst.* (2007), **E63**, o1916- o1918.
508. R. J. Butcher, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, 1-(3-Bromo-2-thienyl)-3-(6-methoxy-2-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1430- o1431.
509. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, K. Sunil, M. Bolte, 4-[(1*E*)-Benzylideneamino]-3-methyl-2,4-dihydro-1*H*-1,2,4-triazole-5-thione, *Acta Cryst.* (2007), **E63**, o1398- o1399.
510. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, 2-(4-Methylbenzoyloxymethyl)-5-(5-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrimidin-1-yl)tetra hydro furan-3-yl 4-methylbenzoate, *Acta Cryst.* (2007), **E63**, o1395-o1397.
511. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(Biphenyl-4-yl)-1-phenylprop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1357-o1358.
512. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(Biphenyl-4-yl)-1-(4-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1355-o1356.
513. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(Biphenyl-4-yl)-1-(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1353-o1354.
514. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(Biphenyl-4-yl)-1-(2,4-dichlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1351-o1352.
515. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (2*E*)-3-(Biphenyl-4-yl)-1-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1349-o1350.
516. H. S. Yathirajan, S. Bindya, B. K. Sarojini, **B. Narayana**, M. Bolte, Methyl 4-(bromomethyl)benzoate, *Acta Cryst.* (2007), **E63**, o1334-o1335.
517. A. Fischer, H. S. Yathirajan, A. Mithun, S. Bindya, **B. Narayana**, Ethyl 7-methyl-

- 2-[4-(methylsulfanyl)benzylidene]-5-[4-(methylsulfanyl)phenyl]-3-oxo-2,3-dihydro-5*H*-thiazolo[3,2-*a*]pyrimidine-6-carboxylate, *Acta Cryst.* (2007), **E63**, o1224-o1225.
518. R. J. Butcher, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, 1-(3-Bromo-2-thienyl)-3-(4-butoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1201-o1203.
519. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, 7-Diethylamino-3-[(2*Z*)-3-(6-methoxy-2-naphthyl)prop-2-enoyl]-2*H*-chromen-2-one, *Acta Cryst.* (2007), **E63**, o1140-o1141.
520. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, (2*E*)-3-(6-Methoxy-2-naphthyl)-1-phenylprop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1012-o1013.
521. R. J. Butcher, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, 1-(3-Bromo-2-thienyl)-3-[4-(dimethylamino)phenyl]prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o1005- o1007.
522. H. S. Yathirajan, A. M. Vijesh, **B. Narayana**, B. K. Sarojini, M. Bolte, 1-(4- {[*E*]- (4-Diethylamino-2-hydroxyphenyl)methylene]amino}phenyl)ethanone, *Acta Cryst.* (2007), **E63**, o936-o938.
523. H. S. Yathirajan, **B. Narayana**, B. V. Ashalatha, B. K. Sarojini, M. Bolte, 5-Bromopyrimidin-2(1*H*)-one, *Acta Cryst.* (2007), **E63**, o923-o924.
524. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, 3-(Biphenyl-4-yl)-2,3-dibromo-1-(2,4-dichlorophenyl)propan-1-one, *Acta Cryst.* (2007), **E63**, o827-o828.
525. H. S. Yathirajan, T. V. Sreevidya, M. Prathap, **B. Narayana**, M. Bolte, 4-Chloro-8-(trifluoromethyl)quinoline, *Acta Cryst.* (2007), **E63**, o763-o765.
526. H. S. Yathirajan, S. Bindya, A. M. Vijesh, **B. Narayana**, M. Bolte, 2-Chloro-4-methylpyridin-3-amine, *Acta Cryst.* (2007), **E63**, o761-o762.
527. H. S. Yathirajan, S. Bindya, T. V. Sreevidya, **B. Narayana**, M. Bolte, A second polymorph of carvedilol, *Acta Cryst.* (2007), **E63**, o542-o544.
528. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, (2*E*)-1-(2,4-Dichlorophenyl)-3-(6-methoxy-2-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o540-41

529. H. S. Yathirajan, A. N. Mayekar, **B. Narayana**, B. K. Sarojini, M. Bolte, (2*E*)-1-(2,4-Dichlorophenyl)-3-(2-hydroxy-3-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o428-o429.
530. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, (2*E*)-1-(2,4-Dichlorophenyl)-3-(2-hydroxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o426-o427.
531. H. S. Yathirajan, A. N. Mayekar, B. K. Sarojini, **B. Narayana**, M. Bolte, (2*E*)-1-(2,4-Dichlorophenyl)-3-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o424-o425.
532. A. Fischer, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, (8*RS*,9*SR*)-Ethyl 4-(3-bromothien-2-yl)-6-(2-furyl)-2-oxocyclohex-3-ene-1-carboxylate, *Acta Cryst.* (2007), **E63**, o254-o255.
533. H. S. Yathirajan, K. Malte, **B. Narayana**, T. V. Sreevidya, M. Bolte, 1,5-Bis(4-bromophenyl)-3-(3-nitrophenyl)pentane-1,5-dione, *Acta Cryst.* (2007), **E63**, o228-o229.
534. H. S. Yathirajan, S. Bindya, A. Mithun, **B. Narayana**, M. Bolte, 5-Phenyl-1-(2-thienyl)penta-2,4-dien-1-one, *Acta Cryst.* (2007), **E63**, o61-o62.
535. R. J. Butcher, H. S. Yathirajan, **B. Narayana**, A. Mithun, B. K. Sarojini, (2*E*)-1-(2,4-Dichlorophenyl)-3-[4-(methylsulfanyl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2007), **E63**, o30-o32.
536. B.V. Ashalatha, **B. Narayana**, K.K. V. Raj, N. S. Kumari, Synthesis of some new bioactive 3-amino-2-mercapto-5,6,7,8-tetrahydro[1]benzothieno[2,3-d]pyrimidin-4(3*H*)-one derivatives, *Eur.J. Med.Chem.* (2007), **42**, 719-728.
537. K.K. Vijaya Raj, **B. Narayana**, B.V. Ashalatha, N. S.Kumari, B.K. Sarojini, Synthesis of some bioactive 2-bromo-5-methoxy-*N'*-[4-(aryl)-1,3-thiazol-2-yl]-benzohydrazide derivatives, *Eur.J. Med. Chem.* (2007), **42**, 425-428.
538. C.Pasha, **B. Narayana**, A facile spectrophotometric method for the determination of hypochlorite using rhodamine B, *J. Braz.Chem. Soc.* (2007), **18**, 167-170.
539. **B. Narayana**, K.K.V. Raj, B.V. Ashalatha, N. S. Kumari, Synthesis of some new 4-(2-chloropyridin-4-yl)-*N*-aryl-1,3-thiazol-2-amine derivatives as possible antifungal and antibacterial agents, *Phosphorus, Sulfur, and Silicon* (2007), **182**, 7-14.
540. T. Cherian, **B. Narayana**, A facile spectrophotometric method for the

determination of iodate in table salt using new chromogenic reagents, *S. Afr. J. Chem.* (2007), **60**, 8–10.

541. B. K. Sarojini, **B. Narayana**, B. V. Ashalatha, J. Indira, K.G. Lobo, Synthesis, crystal growth and studies on non-linear optical property of new chalcones, *J. Cryst. Grow.* (2006), **295**, 54–59.
542. R. J. Butcher, R. S. Narasegowda, H. S. Yathirajan, H. G. Anilkumar, **B. Narayana**, Amlodipine mesylate monohydrate: A twinned and disordered structure, *Acta Cryst.* (2006), **E62**, o5814-o5816.
543. H. S. Yathirajan, T. V. Sreevidya, **B. Narayana**, B. K. Sarojini, M. Bolte, (2*E*)-3-(4-Butoxyphenyl)-1-(4-chlorophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o5923-o5924.
544. H. S. Yathirajan, S. Bindya, **B. Narayana**, B. K. Sarojini, M. Bolte, 4-(Methylsulfanyl)benzaldehyde thiosemicarbazone, *Acta Cryst.* (2006), **E62**, o5925-o5926.
545. W. T. A. Harrison, H. S. Yathirajan, **B. Narayana**, T. V. Sreevidya, K. Sunil, (2*E*)-1-(4-Bromophenyl)-3-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4829-o4831.
546. W. T. A. Harrison, H. S. Yathirajan, B. V. Ashalatha, K. K. Vijaya Raj, **B. Narayana**, 5-Fluoro-1*H*-indole-2-carbohydrazide, *Acta Cryst.* (2006), **E62**, o4986-o4988.
547. H. S. Yathirajan, **B. Narayana**, B. V. Ashalatha, B. K. Sarojini, M. Bolte, (2*E*)-1-(3-Bromo-2-thienyl)-3-(4-methoxy-2,3,6-trimethylphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o5010- o5012.
548. H. S. Yathirajan, K. K. Vijaya Raj, **B. Narayana**, B. K. Sarojini and M. Bolte, 3-(2-Bromo-5-methoxyphenyl)-5-methyl-1-(4-phenyl-1,3-thiazol-2-yl)-1*H*-1,2,4-triazole, *Acta Cryst.* (2006), **E62**, o5013-o5014.
549. W. T. A. Harrison, H. S. Yathirajan, **B. Narayana**, A. Mithun, B. K. Sarojini, (2*E*)-1-(4-Chlorophenyl)-3-[4-(methylsulfanyl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o5290-o5292.
550. W. T. A. Harrison, S. Bindya, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, (2*E*)-3-(1,3-Benzodioxol-5-yl)-1-(4-bromophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o5293-o5295.

551. H. S. Yathirajan, **B. Narayana**, M. Prathap, S. Bindya, M. Bolte, 2-Hydroxy-3,5-diisopropylbenzoic acid, *Acta Cryst.* (2006), **E62**, o4255-o4257.
552. H. S. Yathirajan, **B. Narayana**, B. Ashalatha, B. K. Sarojini, M. Bolte, 3-(6-Methoxy-2-naphthyl)-1-(2-thienyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4440-o4441.
553. H.S. Yathirajan, S. Bindya, B.V. Ashalatha, **B. Narayana**, M. Bolte, 5-(2-Bromo-5-methoxyphenyl)-1,3,4-oxadiazol-2-amine, *Acta Cryst.* (2006), **E62**, o4442-o4443.
554. H. S. Yathirajan, K. K. Vijaya Raj, **B. Narayana**, B. K. Sarojini, M. Bolte, 2-(2-Bromo-5-methoxyphenyl)-6-phenyl-1,3-thiazolo[3,2-b][1,2,4]triazole, *Acta Cryst.* (2006), **E62** o4444-o4445.
555. W.T.A. Harrison, H. S. Yathirajan, A. Mithun, **B. Narayana**, B. K. Sarojini, 3-[4-(Methylsulfanyl)phenyl]-1-(4-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4508-o4509.
556. H. S. Yathirajan, B. Ashalatha, **B. Narayana**, S. Bindya, M. Bolte, (2E)-1-(3-Bromo-2-thienyl)-3-(4-chlorophenyl)prop-2-en-1-one, a twinned crystal structure, *Acta Cryst.* (2006), **E62**, o4551-o4553
557. H. S. Yathirajan, B. K. Sarojini, B. V. Ashalatha, **B. Narayana**, M. Bolte, 1,5-Bis(3-bromo-2-thienyl)-3-(3-nitrophenyl)pentane-1,5-dione, *Acta Cryst.* (2006), **E62**, o4554-o4555.
558. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, S. Bindya, M. Bolte, 3-(1,3-Benzodioxol-5-yl)-1-phenylprop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o3629-o3630.
559. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, S. Bindya, M. Bolte, 1-(2,4-Dichloro-5-fluorophenyl)-3-(3,4-dimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o3631-o3632.
560. W. T. A. Harrison, H. S. Yathirajan, B. V. Ashalatha, K. K. Vijaya Raj, **B. Narayan**, Ethyl 2-acetylamino-4,5,6,7-tetrahydro-1-benzothiophene-3-carboxylate, *Acta Cryst.* (2006), **E62**, o3732-o3734.
561. R. J. Butcher, H. S. Yathirajan, B. V. Ashalatha, **B. Narayana**, B. K. Sarojini, Methyl 5-chloro-1*H*-indole-2-carboxylate. *Acta Cryst.* (2006), **E62**, o3915-o3917.
562. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, B. V. Ashalatha, M. Bolte, (2E)-1-

- (3-Bromo-2-thienyl)-3-(4,5-dimethoxy-2-nitrophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o3964-o3965.
563. H. S. Yathirajan, B. K. Sarojini, S. Bindya, **B. Narayana**, M. Bolte, 3-(6-Methoxy-2-naphthyl)-1-(2-naphthyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4046-o4047.
564. H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, S. Bindya, M. Bolte, (2*E*)-1-(3-Bromo-2-thienyl)-3-(2,5-dimethoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4048-o4049.
565. W. T. A. Harrison, H. S. Yathirajan, B. V. Ashalatha, K. K. Vijaya Raj, **B. Narayana**, Methyl 5-fluoro-1*H*-indole-2-carboxylate, *Acta Cryst.* (2006), **E62**, o4050-o4051.
566. W. T. A. Harrison, H. S. Yathirajan, B. V. Ashalatha, S. Bindya, **B. Narayana**, (2*E*)-1-(3-Bromo-2-thienyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o4164- o4165.
567. W. T. A. Harrison, H. S. Yathirajan, H. G. Anilkumar, B. K. Sarojini, **B. Narayana**, 1-(4-Fluorophenyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o3251-o3253.
568. S. Shettigar, K. Chandrasekharan G. Umesh, B. K. Sarojini, **B. Narayana**, Studies on nonlinear optical parameters of bis-chalcone derivatives doped polymer, *Polymer* (2006), **47**, 3565-3567.
569. R. J. Butcher, H. S. Yathirajan, H. G. Anilkumar, B. V. Ashalatha, **B. Narayana**, 4-Amino-6-phenyl-3-thioxo-2,3-dihydro-1,2,4-triazin-5(4*H*)-one, *Acta Cryst.* (2006), **E62**, o2702-o2704.
570. R. J. Butcher, H. S. Yathirajan, H. G. Anilkumar, B. K. Sarojini, **B. Narayana**, 2,3-Dibromo-3-(4-methoxyphenyl)-1-phenylpropan-1-one, *Acta Cryst.* (2006), **E62**, o2525-o2527.
571. R. J. Butcher, H. S. Yathirajan, A. Mithun, **B. Narayana**, B. K. Sarojini, Chalcone and its hydroxobromo derivative: a 1:1 mixed crystal containing chalcone and 2-bromo-3-hydroxy-1-(4-methylphenyl)-3-[4-(methylsulfanyl)phenyl]propan-1-one, *Acta Cryst.* (2006), **E62**, o2350-o2352.
572. R. J. Butcher, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, K. K. Vijaya Raj, 1,5-Bis(4-chlorophenyl)penta-1,4-dien-3-one, *Acta Cryst.* (2006), **E62**, o1973-o1975.

573. R. J. Butcher, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, J. Indira, 2,6-Bis(4-methoxybenzylidene)cyclohexanone, *Acta Cryst.* (2006), **E62**, o1910-o1912.
574. W. T. A. Harrison, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, J. Indira, 1-(4-Chlorophenyl)-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o1647-o1649.
575. R. J. Butcher, H. S. Yathirajan, H. G. Anilkumar, B. K. Sarojini, **B. Narayana**, 2-Bromo-1-(4-methylphenyl)-3-[4-(methylsulfonyl)phenyl]prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o1659-o1661.
576. W. T. A. Harrison, B. K. Sarojini, K. K. Vijaya Raj, H. S. Yathirajan, **B. Narayana**, A redetermination of 1,5-bis(4-methoxyphenyl)penta-1,4-dien-3-one at 120 (2) K, *Acta Cryst.* (2006), **E62**, o1522- o1523.
577. W. T. A. Harrison, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, K. K. Vijaya Raj, 2-Bromo-1-chlorophenyl-3-(4-methoxyphenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o1578-o1579.
578. R. J. Butcher, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, A. Mithun, 2,3-Dibromo-1-(4-methoxyphenyl)-3-[4-(methylsulfonyl)phenyl]propan-1-one, *Acta Cryst.* (2006), **E62**, o1629- o1630.
579. R. J. Butcher, H. S. Yathirajan, H. G. Anilkumar, B. K. Sarojini, **B. Narayana**, 3-(3,4-Dimethoxyphenyl)-1-(4-fluorophenyl)prop-2-en-1-one, *Acta Cryst.* (2006), **E62**, o1633-o1635.
580. B. Sridhar, K. Ravikumar, H. S. Yathirajan, H. G. Anilkumar, **B. Narayana**, 4-Amino-6-*tert*-butyl-3-thioxo-3,4-dihydro-1,2,4-triazin-5(2*H*)-one, *Acta Cryst.* (2006), **E62**, o1382-o1383.
581. K.K.V. Raj, **B. Narayana**, The one step synthesis of 2-(2-bromo-5-methoxyphenyl)-5-(3-arylidene)-1,3-thiazolo[3,2-*b*]-1,2,4-triazol-6-(5*H*)-ones and the evaluation of the anticonvulsant activity, *Phosphorus, Sulfur, and Silicon* (2006), **181**, 1971-1981.
582. B.V. Ashalatha, **B. Narayana**, N.S. Kumari, Synthesis and biological activity of novel 4-5-6-7-nitro-*N*-(4-aryl-1,3-thiazol-2-yl)-1*H*-indole-2-carbohydrazide derivatives, *Phosphorus, Sulfur, and Silicon* (2006), **181**, 2785-2795.
583. K.K.V. Raj, **B. Narayana**, N.S. Kumari, B.V. Ashalatha, B.K. Sarojini, Neuropsychobehavioral effects and anticancer activity of some substituted triazolo[4,3-*a*] [1,4] benzodiazepines, *J. Pharmacol. Toxicol.* (2006), 1471-477.

584. B.V. Ashalatha, **B. Narayana**, K.K.V. Raj, N. S. Kumari, Synthesis of some new 5-fluoro/chloro/bromo-*N'*-(4-aryl-1,3-thiazol-2-yl)-1*H*-indole-2-carbohydrazide derivatives as possible antifungal and antibacterial agents, *J. Pharmacol. Toxicol.* (2006), **1**, 552-558.
585. K.K.V. Raj, **B. Narayana**, B.V. Ashalatha, N. S. Kumari, New thiazoles containing pyrolopyrimidine moiety as possible analgesic agents, *J. Pharmacol. Toxicol.* (2006), **1**, 559-565.
586. **B. Narayana**, C.Pasha, T. Cherian, M. Mathew, Spectrophotometric method for the determination of iodate using methylene blue as a chromogenic reagent, *Bull. Chem. Soc. Ethiop.* (2006), **20**, 143-147.
587. **B. Narayana**, K.K.V. Raj, N.S. Kumari, Synthesis of some new substituted triazolo-[4,3-*a*][1,4]benzodiazepine derivatives as potent anticonvulsants, *Eur. J. Med. Chem.* (2006), **41**, 417- 422.
588. **B. Narayana**, B.V. Ashalatha, K.K.V. Raj, Synthesis of 4-,5-,6- and 7- nitro-indole-2-methanols and 4-,5-,6- and 7-nitroindole-2-carbaldehydes, *J. Chem. Res.* (2006), 309-311.
589. T. Cherian, **B. Narayana**, A new system for the spectrophotometric determination of trace amounts of nitrite in environmental samples, *J. Braz. Chem. Soc.* (2006), **17**, 577-581.
590. **B. Narayana**, K.K.V. Raj, B.V. Ashalatha, N.S. Kumari, Synthesis of some new 4-{2-[(aryl)amino]-1,3-thiazol-5-yl}benzene-1,2-diol as possible antibacterial and antifungal agents, *Phosphorus, Sulphur and Silicon* (2006), **181**, 1381-1389.
591. C. Pasha, **B. Narayana**, A highly sensitive spectrophotometric method for the determination iodate using Leuco xylene cyanol FF, *Acta Chim. Slov.* (2006), **53**, 77-80.
592. **B. Narayana**, C. Pasha, T. Cherian, M. Mathew, Spectrophotometric method for the determination of iodate using methylene blue as a chromogenic reagent, *Bull. Chem. Soc. Ethiop.* (2006), **20**, 143-147.
593. W. T. A. Harrison, H. S. Yathirajan, H. G. Anilkumar, B. K. Sarojini, **B. Narayana**, K.G. Lobo, 1-(2-Bromo-5-methoxyphenyl)-8-chloro-6-(2-fluorophenyl)-4*H*-1,2,4-triazolo[4,3-*a*][1,4]benzodiazepine, *Acta Cryst.* (2005), **E61**, 3810-3812.
594. W. T. A. Harrison, H. S. Yathirajan, B. K. Sarojini, **B. Narayana**, H. G. Anil Kumar, Do C-H...O and C-H... π interactions help to stabilize a non-centrosymmetric structure for racemic 2,3-dibromo-1,3-diphenylpropan-1-one, *Acta Cryst.* (2005), **C61**, 728-730.

595. **B. Narayana**, B.V. Ashalatha, K.K. V.Raj, J. Fernades, B.K. Sarojini, Synthesis of some new biologically active 1,3,4-oxadiazolyl nitroindoles and a modified Fischer indole synthesis of ethyl nitro indole-2-carboxylates, *Bioorg. Med. Chem.* (2005), **13**, 4638-4644.
596. T. Cherian, **B. Narayana**, A new spectrophotometric method for the determination of arsenic in environmental and biological samples, *Anal. Lett.* (2005), **38**, 2207-2216.
597. **B. Narayana**, K.K.V. Raj, B.V. Ashalatha, N.S. Kumari, Synthesis of some new 2-(6-methoxy-2-naphthyl)-5-aryl-1,3,4-oxadiazoles as possible non-steroidal anti-inflammatory and analgesic agents, *Pharmazie* (2005), **338**, 373-377.
598. B.K. Sarojini, **B. Narayana**, J. Indira, K.G. Lobo, Growth characterization and non linear optical property of 6-methoxy-2-naphthaldehyde, *Proc. SPIE. Linear and Nonlinear Optics of Organic Materials V; Manfred Eich; Ed.* (2005), **5935**, 247-253.
599. T. Cherian, **B. Narayana**, A simple spectrophotometric determination of trace amounts of vanadium using thionin, *Bull. Chem. Soc. Ethiop.* (2005), **19**, 154-161.
600. **B. Narayana**, T. Cherian, A facile spectrophotometric method for the determination of periodate using azure B, *J. Braz. Chem. Soc.* (2005), **16**, 978-981.
601. **B. Narayana**, T. Cherian, Spectrophotometric determination of trace amounts of chromium by the oxidation of azure B, *Oxdn. Comm.* (2005), **28**, 923-929.
602. **B. Narayana**, T. Cherian, M. Mathew, N.V. Sreekumar, A facile spectrophotometric method for the determination of hypochlorite using thionine, *J. Anal. Chem.* (2005), **60**, 706-709.
603. **B. Narayana**, T. Cherian, Rapid spectrophotometric determination of trace amounts of chromium using variamine blue as a chromogenic reagent, *J. Braz. Chem. Soc.* (2005), **16**, 197-201.
604. N.G. Bhat, **B. Narayana**, Complexes of Ag(I), Tl(I), Zn(II), Hg(II), Cd(II), Pd(II), Cu(II) and Ni(II) with 4-[(4-Dimethylaminobenzylidene)amino-5-ethyl-2,4-dihydro-[1,2,4]-triazole-3-thione (HDEDT) and 4-[(BenzylidenE)amino]-6-(t-butyl)-4H-[1,2,4]-triazine-3-thione-5-one(HBBTT), *Synth. React. Inorg. Metal-organic Nanomet.Chem.* (2005), **35**, 253-262.
605. B.K. Sarojini, **B. Narayana**, Synthesis and studies on non-linear optical property of new chalcones, Seventh International Conference on Optoelectronics, *Fiber Optics and Photonics-Photonics* (2004), CUSAT, Paper No.P.31.
606. **B. Narayana**, K.K.V. Raj, B.V. Ashalatha, B.K.Sarojini, N.S. Kumari, Synthesis of some new 5-(2-substituted-1,3-thiazol-5-yl)-2-hydroxy benzamides and their 2-

alkoxy derivatives as antifungal agents, *Eur. J. Med. Chem.* (2004), **39**, 867-872

607. M. Mathew, **B. Narayana**, N.V. Sreekumar, K. Vipin, A simple and sensitive spectrophotometric method for the determination of cerium(IV) using variamine blue as chromogenic reagent, *Microchimica Acta* (2004), **144**, 291-295
608. C.H.R. Nambiar, **B. Narayana**, A. Joseph, Complexometric determination of cobalt(II) in isolation and alloy composition using 2,2'-bipyridyl as selective releasing agent, *Chemist- Analyst* (2004), **49**, 117-120.
609. **B. Narayana**, K.S. Bhat, N.V. Sreekumar, C.H.R. Nambiar, Selective complexometric determination of copper in ores, alloys and complexes using DL-penicillamine as masking agent, *Chemist- Analyst* (2003), **48**, 869-872.
610. **B. Narayana**, M. Mathew, N.G. Bhat, N.V. Sreekumar, Spectrophotometric determination of selenium using potassium iodide and starch as reagents, *Microchimica Acta* (2003), **141**, 175-178.
611. N.V. Sreekumar, **B. Narayana**, B.R. Manjunatha, P. Hegde, B.K. Sarojini, Determination of nitrite by diazotisation method, *Microchemical J.* (2003), **74**, 27-32.
612. N.V. Sreekumar, N.G. Bhat, **B. Narayana**, R.A. Nazareth, Complexometric determination of titanium(IV) using potassium tartrate or ascorbic acid as masking reagent, *Microchimica Acta* (2003), **141**, 29-33.
613. N.V. Sreekumar, R.A. Nazareth, **B. Narayana**, Indirect complexometric determination of thorium(IV) using sodium fluoride as masking agent, *Microchimica Acta* (2002), **140**, 77-79.
614. N.V. Sreekumar, R.A. Nazareth, **B. Narayana**, Indirect complexometric determination of mercury(II) using potassium bromide as selective masking agent, *Microchimica Acta* (2002), **140**, 63-67.
615. N.V. Sreekumar, R.A. Nazareth, **B. Narayana**, Indirect complexometric determination of thorium(IV) using sulfosalicylic acid as masking agent, *Chemist-Analyst* (2002), **47**, 759-764.
616. N.V. Sreekumar, **B. Narayana**, R.A. Nazareth, N.G. Bhat, P. Hegde, B.R. Manjunath, Indirect complexometric determination of cadmium(II) using sodium thiosulphate as a masking reagent, *Chemist- Analyst* (2002), **47**, 765-768.
617. R.A. Nazareth, **B. Narayana**, N.V. Sreekumar, Indirect complexometric determination of mercury(II) using sodium chloride as selective masking agent, *Chemist-Analyst* (2002), **47**, 645-648.
618. N.G. Bhat, **B. Narayana**, N.V. Sreekumar, Complexometric determination of thallium(III) in low concentrations using oxalic acid as releasing agent, *Annali Di*

Chem. (2002), **92**, 139-142.

619. C.H.R. Nambiar, **B. Narayana**, N.V. Sreekumar, Indirect complexometric determination of mercury(II) using thioglycolic acid masking agent, *Chemist-Analyst* (2001), **46**, 745-750.
620. R. A. Nazareth, **B. Narayana**, N.V. Sreekumar, Indirect complexometric determination of mercury(II) using guanidine nitrate as selective masking agent, *Analytical Sciences (Japan)* (2001), **17**, 1339-1341
621. A. Joseph, **B. Narayana**, Indirect complexometric determination of zinc(II) using 2,2'-dipyridyl as selective masking agent, *Mikrochimica Acta* (2000), **134**, 34-35.
622. **B. Narayana**, N.G. Bhat, K.S. Bhat, C.H.R. Nambiar, B. Ramachandra, A. Joseph, Selective complexometric determination of copper in ores and alloys using 2,2'-dipyridyl as masking agent, *Microchemical J.* (2000), **64**, 221-225.
623. A. Joseph, **B. Narayana**, Complexometric determination of indium(III) using 2-mercaptoethanol as masking agent, *Chemist-Analyst* (2000), **45**, 751-754.
624. A. Joseph, **B. Narayana**, Complexometric determination of cobalt(II) in low concentrations using 1,10-phenanthroline as selective releasing agent, *Analytical Sciences (Japan)* (2000), **16**, 985-986.
625. A. Joseph, **B. Narayana**, Complexometric determination of nickel(II) using 2,2'-dipyridyl as a selective masking reagent, *Annali Di Chimica (Italy)* (2000), **90**, 287-292.
626. C. H. R. Nambiar, **B. Narayana**, Complexometric determination palladium(II) using sodium oxalate as a selective masking agent, *Chemist-Analyst* (1999), **44**, 1085-1088.
627. B. Ramachandra, **B. Narayana**, Indirect complexometric determination of cadmium using 1,10-phenanthroline as selective masking agent, *Mikrochimica Acta* (1997), **126**, 223-225.
628. B. Ramachandra, **B. Narayana**, Selective complexometric determination of mercury using 1,10-phenanthroline as masking agent, *Annali Di Chimica (Italy)* (1997), **87**, 647-652
629. **B. Narayana**, M. R. Gajendragad, Complexes of Zn(II), Pd(II), Hg(II), Pb(II), Cu(I), Ag(I), and Tl(I) with 4-amino-5-mercapto-3-o-tolyloxymethyl-1,2,4-triazole, *Tr. J. Chem.* (1997), **21**, 71-76.
630. **B. Narayana**, M. R. Gajendragad, Synthesis and characterization of complexes of Co(II), Ni(II), Cd(II), Hg(II) and Pd(II) with some *N*-phenyl-*N'*-2-[4-phenyl (substituted)-thiazolyl] thioureas, *Tr. J. Chem.* (1997), **21**, 65-70.

631. C. H. R. Nambiar, **B. Narayana**, B. Mathew, Indirect complexometric determination of Mercury(II) using sodium thiosulphate as a masking reagent, *Microchem. J.* (1996), **53**, 175-179.
632. **B. Narayana**, B. M. Rao , C. H. R. Nambiar, Indirect complexometric determination of palladium using L-histidine as masking agent, *Mikrochimica Acta* (1996), **124**, 167-170.
633. **B. Narayana**, B. Mathew, B. Ramachandra, Indirect complexo-titrimetric determination palladium(II) using semicarbazide as a masking reagent, *Chimica Acta Turcica* (1996), **24**, 95-99.
634. B. Ramachandra, **B. Narayana**, K. S. Bhat, Selective complexometric determination of zinc using 1,10-phenanthroline as a masking reagent, *Analytical Proceedings-Communications* (1995), **32**, 379-381.
635. B.Mathew, **B. Narayana**, B. M. Rao, B. Ramachandra, Selective complexometric determination of thallium using semicarbazide as a releasing agent, *Mikrochimica Acta* (1995), **122**, 295-299.
636. B. Mathew, B. M. Rao, **B. Narayana**, Selective complexometric determination of mercury using acetylacetone as masking agent, *Analyst* (1995), **120**, 1097-1098.
637. B. M. Rao, **B. Narayana**, B. Mathew, K. S. Bhat, Indirect complexometric determination of palladium using sodium nitrite as masking agent, *Mikrochimica Acta* (1995), **118**, 63-68.
638. B. M. Rao, **B. Narayana**, Selective complexometric determination of thallium(III) using hydroxylamine hydrochloride as a indirect masking agent, *Annali Di Chimica (Italy)* (1995), **85**, 105-109.
639. B. Mathew, **B. Narayana**, B. M. Rao, Selective complexometric determination of mercury using sodium nitrite as masking agent, *Mikrochimica Acta* (1995), **118**, 197-201
640. C. H. R. Nambiar, **B. Narayana**, B. M. Rao, B. Mathew, Complexometric determination of thallium(III) using sodium sulphite as a selective releasing agent, *Analyst* (1995), **120**, 1843-1845
641. B. Ramachandra, **B. Narayana**, Gravimetric determination of silver(I) using 4-benzylideneamino-3-mercapto-6-methyl- 1,2,4-triazin(4H)5-one, *Tr. J. Chem.* (1995), **19**, 80-86.
642. B. M. Rao, **B. Narayana**, K. S. Bhat, Complexometric determination of (II) in ores, alloys and complexes using 2-mercaptoethanol as indirect masking reagent, *Mikrochimica Acta* (1994), **117**, 109-115
643. B. M. Rao, **B. Narayana**, Selective complexometric determination of palladium(II)

- using DL-methionine as a selective masking reagent, *Analyst* (1994), **119**, 2217-2219.
644. A. Joseph, **B. Narayana**, S. Mahadevi, B. Ramachandra, Complex of Ag(I), TI(I), Ni(II), Ru(II), Co(II), Zn(II), Cd(II), Hg(II), Pd(II), Ru(III), Rh(III) and Pt(IV) with 4-amino-3-mercapto-6-methyl-1,2,4-triazin(4H)-5-one, *Tr. J. Chem.* (1994), **18**, 14-21.
645. B. M. Rao, **B. Narayana**, Selective complexometric determination of palladium(II) using sulphite as releasing agent, *Annali Di Chimica (Italy)* (1993), **83**, 431-439.
646. B. M. Rao, **B. Narayana**, Selective complexometric determination of mercury(II) with sulphite as indirect masking agent, *Mikrochimica Acta* (1993), **111**, 251-255.
647. B. M. Rao, **B. Narayana**, Selective complexometric determination of thallium(III) with ascorbic acid as a demasking reagent, *Tr. J. Chem.* (1993), **17**, 138-141.
648. B. M. Rao, **B. Narayana**, Determination of Hg(II) using 2-mercaptoethanol as a releasing agent, *Chimica Acta Turcica* (1993), **21**, 27- 32.
649. B. M. Rao, **B. Narayana**, Complexometric determination of palladium(II) in isolation, complexes and alloys using DL-cysteine as a selective masking agent, *Tr. J. Chem.* (1993), **17**, 13-18.
650. **B. Narayana**, G.T. Kuchinad, M.R. Gajendragad, Complexo-titrimetric determination of mercury(II) using hexahydropyrimidine-2-thione as a selective masking agent, *Chinese J. Chemistry* (1992), **10**, 412-416.
651. **B. Narayana**, M.R. Gajendragad, Complexometric determination of copper in isolation, alloys and complexes using DL-cysteine as a selective masking agent, *Analyst* (1992), **117**, 203-205.
652. **B. Narayana**, M.R. Gajendragad, Complexometric determination of mercury(II) with 2-imidazolidinethione as a selective masking agent, *Talanta* (1988), **35**, 719-720.
653. **B. Narayana**, M.R. Gajendragad, Determination of palladium (II) using thiosemicarbazide as a replacing reagent, *Microchem. J.* (1987), **36**, 364-367.

B. National Journals

1. K. G. Chandrashekhara, N. G. Bhat, **B. Narayana**, P. Nagaraj, Indirect complexometric determination of manganese(II) using tartaric acid as a masking agent, *J. Indian Chem. Soc.* (2014), **91**, 1973-1975.
2. A.K. Srivatsava, V. Baboo, **B. Narayana**, B. K. Sarojini, N. Misra, Comparative DFT

study on reactivity, acidity and vibrational spectra of halogen substituted phenyl acetic acids, *Indian J Pure and Appl. Phys.* (2014), **52**, 507-509.

3. **B. Narayana**, K. Veena, A new method for the spectrophotometric determination of fexofenadine hydrochloride, *Indian J. Chem. Tech.* (2010), **17**, 386-390.
4. J. Bincy, J. Sam, Abraham Joseph, **B. Narayana**, Imidazolidine-2-thione as corrosion inhibitor for mild steel in hydrochloric acid, *Indian J. Chem. Tech.* (2010), **17**, 366-374.
5. **B. Narayana**, N. S. Divya, Novel methods for the spectrophotometric determination of colchicoside, *Indian J. Chem. Tech.* (2010), **17**, 317-320.
6. **B. Narayana**, N. S. Divya, A new method for spectrophotometric determination of colchicoside, *J. Sci. Indus. Res.* (2010), **69**, 368-372.
7. **B. Narayana**, K. Ashwini, Spectrophotometric determination of frusemide by its oxidation with ceric ammonium sulphate, *Indian J. Chem. Tech.* (2010), **17**, 150-153.
8. **B. Narayana**, B. V. Ashalatha, K. K. Vijaya Raj, B. K. Sarojini, Synthesis and studies on antimicrobial, antiinflammatory and antiproliferative activities of heterocycles derived from 4-/5-/6-/7-nitro/5-fluoro/chloro/bromoindole-2-carbohydrazides, *Indian J. Chem.* (2009), **48B**, 1794-1805.
9. T. V. Sreevidya, **B. Narayana**, **Simple and facile methods for the determination of carvedilol in pharmaceuticals**, *Indian J. Chem. Tech.* (2009), **16**, 74-78.
10. K. Veena, **B. Narayana**, Spectrophotometric **determination of nitrite using new coupling agents**, *Indian J. Chem. Tech.* (2009), **16**, 89-92.
11. T. V. Sreevidya, **B. Narayana**, Spectrophotometric determination of artemisinin and dihydroartemisinin, *Indian J. Chem. Tech.* (2008), **15**, 59-62.
12. A. Joseph, B. Joseph, **B. Narayana**, Complexes of Ag(I), Tl(I), Zn(II), Cd(II), Hg(II), Co(II), Ni(II), Ru (II), Pd(II), Ru(III), Rh(III) and Pt(IV) with 4-(pyridine-2-carboxylidene-amino)-5-mercapto-1,2,4-triazole, *J. Indian Chem. Soc.* (2008), **85**, 479-484.
13. A. Joseph, **B. Narayana**, Synthesis and characterization of AgI, Tl(I), Zn(II), Cd(II), Hg(II), Pd(II), Co(II) and Ni(II) complexes with 4-salicylideneamino-3-mercapto- 6-t-butyl-1,2,4- triazin(4H)-5-one, *J. Indian Chem. Soc.* (2007), **84**, 746-749.
14. M. Mathew, **B. Narayana**, A highly sensitive spectrophotometric method for the determination of trace copper using azure B as a chromogenic reagent, *J. Sci. Indus. Res.* (2007), **66**, 28-31.
15. Tom Cherian, **B. Narayana**, A new system for spectrophotometric determination of trace amounts of selenium, *Indian J. Chem. Tech.* (2006), **13**, 222-225.

16. **B. Narayana**, K. K. Vijaya Raj, B. V. Ashalatha, N. S. Kumari, Antibacterial and antifungal studies on some new acetylcinnolines and cinnolinyl thiazole derivatives, *Indian J. Chem.* (2006), **45B**, 1704-1709.
17. **B. Narayana**, B. V. Ashalatha, K. K. Vijaya Raj, N. Suchetha Kumari, Synthesis of 3-amino-2-methyl/ethyl-5,6,7,8-tetrahydro[1]benzothieno[2,3-*d*] pyrimidin-4(3*H*)-one and its Schiff bases as possible antimicrobial and non-steroidal antiinflammatory agents. *Indian J. Chem.* (2006), **45B**, 2696-2703.
18. **B. Narayana**, B. V. Ashalatha, K. K. Vijaya Raj, Simple synthesis of 5-fluoro/chloro/bromoindole-2-methanols and 5-fluoro/chloro/bromoindole-2-aldehydes, *Org.Chem. An Indian Journal* (2006), **2**, 5-9.
19. Tom Cherian, **B. Narayana**, A new system for spectrophotometric determination of trace amounts of selenium, *Indian J. Chem. Tech.* (2006), **13**, 222-225.
20. **B. Narayana**, T. Cherian, M. Mathew, C. Pasha, Spectrophotometric determination of arsenic in environmental and biological samples, *Indian J. Chem. Tech.* (2006), **13**, 36-40.
21. **B. Narayana**, M. Mathew, Spectrophotometric determination of dissolved oxygen in water, *Indian J. Chem. Tech.* (2005), **12**, 596-600.
22. T. Cherian, B.Narayana, Spectrophotometric determination of chromium using saccharin, *Indian J. Chem. Tech.* (2005), **12**, 601-605.
23. **B. Narayana**, K. Vipin, M. Mathew, N. V. Sreekumar, A facile spectrophotometric method for the determination of hypochlorite using azure B, *Indian J. Chem.* (2004), **43A**, 573-575.
24. **B. Narayana**, M. Mathew, K. Vipin, N. V. Sreekumar, Spectrophotometric determination of copper using variamine blue as chromogenic reagent, *J. Indian Chem. Soc.* (2003), **80**, 937-938.
25. R.A. Nazareth, **B. Narayana**, Spectrophotometric determination of nickel in alloys using 5-mercapto-3-methyl-4- [2-pyridylideneamino]-1,2,4-triazole (MMPT), *Indian J. Chem.* (2003), **42A**, 564-567.
26. N. G. Bhat, **B. Narayana**, N. V. Sreekumar, R. A. Nazareth, C.H.R. Nambiar, Spectrophotometric determination of nickel(II) using 5-sulphosalicylic acid, *J. Indian Chem. Soc.* (2003), **80**, 939-940.
27. C. H. R. Nambiar, **B. Narayana**, N. V. Sreekumar, R. A. Nazareth, N. G. Bhat, Spectrophotometric determination of platinum(IV) using anthranilic acid. *J. Indian Chem. Soc.* (2002), **79**, 778-779.
28. R. A. Nazareth, **B. Narayana**, N. V. Sreekumar, Spectrophotometric determination of copper(II) using 4-vanillideneamino-3-methyl-5-mercapto-1,2,4-triazole(VAMMT) *Indian*

J. Chem. (2001), **40A**, 1016-1018.

29. B. Ramachandra , **B. Narayana**, 4-Vanillideneamino-3-methyl-5-mercapto-1,2,4- triazole towards transition metal ions, *J. Indian Chem. Soc.* (2000), **77**, 440-441.
30. A. Joseph, **B. Narayana**, Indirect complexometric determination of nickel using 1,10-phenanthroline and copper(II) using cystamine hydrochloride as releasing agent, *Indian J. Chem.* (1999), **38A**, 628-630.
31. B. Ramachandra, **B. Narayana**, Physico-chemical investigations of yttrium and lanthanide perchlorate complexes of 4-salicylideneamino-3-mercapto-6-methyl-1,2,4-triazin(4H)-5-one, *Indian J. Chem.* (1999), **38A**, 1297-1299.
32. A. Joseph, **B. Narayana** , K.S. Bhat, Complexometric determination of mercury(II) and thallium(III) using cysteamine hydrochloride as selective releasing agent, *J. Indian Chem. Soc.* (1999), **76**, 650-651.
33. K. S. Bhat, **B. Narayana**, C.H.R. Nambiar, Complexometric determination of mercury(II) using 4-amino-5-mercapto-1,2,4- triazole as a indirect masking reagent, *J. Indian Chem. Soc.* (1999), **76**, 163-164.
34. B. Ramachandra, **B. Narayana**, Complexes of Ag(I), Tl(I), Zn(II), Pb(II), Cd(II), Hg(II), Co(II), Ni(II), Ru(II), Pd(II), Rh(III) and Ir(III) with salicylidene-amino-3-mercapto-1,2,4-triazine(4H)-5-one, *J. Indian Chem. Soc.* (1999), **76**, 239-242.
35. B. Mathew, **B. Narayana**, B. Ramachandra, Complexing behaviour of 4-benzylidene-amino-3-methyl-1-piperidinomethyl-1,2,4-triazole-5-thione towards some transition metal ions, *J. Indian Chem. Soc.* (1999), **76**, 155-156.
36. A. Joseph, B. Narayana, Complexometric determination mercury(II) in isolation, alloys and complexes using DL-cysteine as indirect masking agent, *Res. J. Chem. Environ.* (1999), **3**, 49-53.
37. K. S. Bhat, **B. Narayana**, Selective complexometric determination of palladium(II) using 2,2'-dipyridyl as a selective releasing agent, *Res. J. Chem. Environ.* (1999), **3**, 65-67.
38. B. Ramachandra, **B. Narayana**, Indirect complexometric determination of palladium(II) using hydrazine sulphate as a releasing agent, *J. Indian Chem. Soc.* (1998), **75**, 432-433.
39. A. Joseph, **B. Narayana**, Thermogravimetric study of the nonisothermal decomposition of Ru(II) and Pt(IV) complexes of 4-amino- 3-mercapto-6-methyl-1,2,4- triazin-(4H)-5-one, *J. Indian Chem. Soc.* (1998), **75**, 253-255.
40. **B. Narayana**, M.R. Gajendragad, K. S. Bhat, Complexometric determination of palladium(II) using thiocarbohydrazide as a masking reagent, *J. Indian Chem. Soc.* (1998) **75**, 112-113.

41. C. H. R. Nambiar, **B. Narayana**, Indirect complexometric determination of thallium using thiourea as masking agent. *J. Indian Chem. Soc.* 75: 265-266.
42. B. Ramachandra and **B. Narayan**, Gravimetric determination of Silver(I) using 4-vanilideneamino-3-mercapto-5-methyl-1,2,4-triazole, *J. Indian Chem. Soc.* (1997), **74**, 250-251.
43. A. Joseph, **B. Narayana**, B. Mathew, Complexometric determination of thallium in isolation alloys and complexes using thiosulphate as a selective masking agent, *J. Indian Chem. Soc.* (1996), **73**, 633-634.
44. **B. Narayana**, Selective complexometric determination of copper with L- cysteine as a masking agent, *3rd Kerala Science Congress* (1991), 320-321.
45. **B. Narayana**, M.R. Gajendragad, Complexo-titrimetric estimation of thallium(III) using thiosemicarbazide as replacing reagent, *J. Indian Chem. Soc.* (1987), **64**, 620-622.
46. **B. Narayana**, M. R. Gajendragad, Estimation of palladium(II) using 4-amino-3-mercapto-1,2,4- triazin(4H) -5-one as replacing reagent, *Curr. Sci.* (1987), **56**, 1279.

VI. Research Areas of Interest

- i) Analytical Chemistry : *Spectrophotometric, Gravimetric and Masking Reagents*
- ii) Water Chemistry : *Pollution and Related Studies & Corrosion Inhibition*
- iii) Organic Synthesis : *Synthetic methods- New compounds NLO Materials*
- iv) Structural Studies : *Single Crystal X-ray diffraction studies*

VII. PhD's Guided

S.No.	Name	Title	Awarded
01.	Dr. B. Muralidhara Rao	Studies on sulphur and nitrogen donor ligands as complexing agents and masking reagents.	26-03-1996
02.	Dr. Biju Mathew (CSIR, SRF)	Studies on the analytical applications and complexing structure of N, O and S donor ligands.	26-12-1997
03.	Dr. B. Ramachandra	Studies on N, O and S donor ligands as complexing agents, masking and gravimetric	26-06-1998

		reagents.	
04.	Dr. Abraham Joseph	Studies on O, N and S donor ligands as complexing agents, analytical reagents and corrosion inhibitors.	04-11-2000
05.	Dr. K. Subramanya Bhat	Studies on the complexing and analytical structure of sulfur, nitrogen and oxygen donor ligands reagents.	13-12-2000
06.	Dr. C.H. R. Nambiar	Studies on some sulphur and nitrogen donor ligands in complexometry and spectrophotometry.	21-10-2002
07.	Dr. Ronald A. Nazareth	Analytical investigations with oxygen, nitrogen and sulphur donor ligands.	10-01-2003
08.	Dr. N.V. Sreekumar	Studies on new reagents for titrimetric, spectrophotometric determination of pollutants and corrosion inhibitor for metals in service.	30-01-2003
09.	Dr. N.G. Bhat	Studies on the complexing structure and analytical application of nitrogen, oxygen and sulfur donor heterocyclic ligands and allied reagents.	19-11-2003
10.	Dr. Tom Cherian	Studies on new reagents for the spectrophotometric and complexometric determinations of metal ions and anions.	20-07-2006
11.	Dr. M. Mathew	Studies on new reagents for the spectrophotometric determination of metal ions, anions and synthesis of some liquid crystalline materials.	01-12-2006
12.	Dr. K.K. Vijaya Raj	Synthesis and characterization of some new bioactive heterocyclic derivatives.	15-06-2007
13.	Dr. B.V. Ashalatha	Synthesis, characterization and applications of heterocyclic compounds.	29-11-2007
14.	Dr. T.V. Srividya	Spectrophotometric determinations and single crystal X-ray studies of some drugs and allied	31-10-2009

		compounds.	
15.	Dr. Chand Pasha	Studies on new reagents for the spectrophotometric determination of anions, metal ions and drugs.	31-10-2009
16.	Dr. K. Sunil	Studies on new reagents for the spectrophotometric determination of metal ions and anions, and single crystal X-ray crystallography on some 68truct bases.	08-01 2010
17.	Dr. K. Veena	Spectrophotometric determination of some bioactive compounds and single crystal X-ray 68tructures of chalcones.	02-08-2010
18.	Dr. S. Samshuddin	Synthesis and structural studies of some new nitrogen containing heterocyclic compounds	20-04-2013
19.	Dr.Divya N. Shetty	Studies on new reagents for the spectrophotometric determinations of some drugs and their intermediates	21-09-2013
20.	Ms. K. Divya	New Spectrophotometric Assay for the Determination of Some Selected Drugs in Pure and Dosage Forms	Submitted (01-08-2014)
21.	Mr.P. S. Nayak	Synthesis, Structural and Biological studies on Nitrogen containing heterocyclic compounds and Their Intermediates	Submitted (11-12-2014)

Research Scholars Working

S. No.	Name	Title	Submitted/ Ongoing
01.	Mr. R. Srinivasan	Synthesis, Biological and Structural Studies of Some New Aryl, Heteroaryl Piperidines and Spiro Cyclic Compounds	Registered for PhD
02.	Mrs. M. Sapna Kumari	Synthesis and structural studies on novel	Registered

	INSPIRE Fellow	heterocycles	for PhD
03.	Mrs. Subbulakshmi N Karanth	Synthesis, structural and antioxidant studies on thiazoles and related compounds	Registered for PhD
04.	Ms. Nasrin Banu Shaikh Ismail	Development of visible spectrophotometric methods for the assay of some drugs in bulk and formulations	Registered for PhD
05.	Ms. Vinutha V. Salian	Synthesis and structural studies on cyclic derivatives derived from chalcones	Registered for PhD
06.	Mr. Srinivasa Kamath	Standardisation of methods for long term measurement of air ³ H, OBT and TFWT in environmental matrices	Enrolled for PhD
07.	Ms. Jayashree A	Studies on synthesis of some heterocyclic compounds by multicomponent reactions	Enrolled for PhD
08.	Mrs. Dhanusha K. K.	Spectrophotometric determination of some drugs and their derivatives	Enrolled for PhD