

Curriculum Vitae

Dr. Vasudevan Dhayalan

Assistant Professor
Department of Chemistry
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NITPY home page Link: <https://vasudeva49.wixsite.com/catalysislab>

Education

Postdoctoral fellow (3):

Jan. 2016 – Oct. 2020 worked with **Prof. Dr. Anat Milo** at Department of Chemistry, Ben-Gurion University of the Negev, Beer Sheva, **Israel**. My research work there was focused on synthesis and organocatalysis, specifically on the synthesis and catalytic applications of chiral *N*-heterocyclic carbenes and of chiral thiourea derivatives.

Postdoctoral fellow (2):

Jan. 2013 – Dec. 2015 worked with **Prof. Dr. Paul Knochel** at Department of Chemistry, Ludwig-Maximilians-University Munich (LMU), Munich, **Germany**. My research work there was focused on the synthesis of organometallic reagents based on Mg, Zn, B, Al and Li for the functionalization of aromatics, hetero-aromatics, alkyl compounds as well as for adamantyl derivatives.

Postdoctoral fellow (1):

Apr. 2011 - Dec. 2012 worked with **Prof. Dr. Masahiko Hayashi** at Kobe University, Kobe, **Japan**. My research work there was focused on asymmetric synthesis using chiral Schiff base ligands and organometallic chemistry/catalysis.

Ph.D (Organic Chemistry):

Oct. 2006 - Dec. 2010 worked with **Prof. Dr. A. K. Mohanakrishnan** at University of Madras, Chennai, **India**.

Thesis Title: "Lewis acid-mediated domino reaction of aryl/heteroaryl methylbromides containing malonylidene unit with arenes/heteroarenes". Lewis acid catalyzed domino reactions for the synthesis of heterocyclic compounds, such as indole, carbazole, furan, thiophene and its derivatives.

M.Sc (Organic Chemistry):

Jun. 2003 - Apr. 2005 worked with **Prof. Dr. A. K. Mohanakrishnan** at University of Madras, Chennai, **India**.

Dissertation Title: "Preferential synthetic elaboration at the 2-position of *N*-protected 2,3-dimethyl indole".

First division.

B.Sc (Chemistry): Jun. 2000 - Apr. 2003 at University of Madras, Chennai, **India**. First division.

Academic Experience

Nov. 2020 – Jan.2025 (4 yrs): Working as a **Ramanujan Faculty** at the Department of Chemistry, **National Institute of Technology Puducherry** (NITPY), Karaikal - 609 609, Puducherry State, India.

NITPY home page Link: <https://vasudeva49.wixsite.com/catalysislab>

Teaching

B.Tech. in Engineering Chemistry and Chemistry Laboratory (2020-2024)

CSE: CH111, CH1002, 60-65 students feedback score: up to 91% (5 courses)

EEE: CH132, CH1002, 55-62 students feedback score: up to 94% (4 courses)

MSc: CH5106 (Organic Reaction & Mechanism), CH5117 (Synthetic Organic Chemistry), and

CH5005 (Polymer Chemistry): 4 Courses (2022-2024)

List of Research Projects

Ramanujan Faculty Fellowship grant from DST-SERB for Rs. 1,19,00,000/- from 28 Dec. **2020** to 27 Dec. **2025**
(Grant no: RJF/2020/000038)

Core Research Grant (CRG) from DST-SERB for Rs. 53,13,440.00/- from 15 March. **2023** to 14 March. **2026**
(Grant no: CRG/2022/001855)

Experimental and Instrumentation Skills

- Column chromatography, crystallization, distillation, vacuum distillation, Schlenk and glove box techniques.

- Experience in performing Na, Li, RLi, LAH, R₂Zn, R₃Al, RMgX, RZnX mediated organic reactions, multi-step organic synthesis.
- NHC, Schiff base (NNO, NNP) organo and metal-catalyzed chiral synthesis.
- Analysis techniques: NMR (¹H, ¹³C, ¹⁹F), IR, UV, GC, Mass Spectrometry (GC-MS, LC-MS, MALDI-TOF).
- HPLC, Polarimeter, CV, single-crystal X-ray analysis.

Awards and Honors

- **Ramanujan Fellowship** (Science and Engineering Research Board, Aug.2020 – July 2025)
- PBC Postdoctoral research fellowship (The Council for Higher Education of Israel): Oct. 2016 - Sept. 2019)
- SRF Doctoral research fellowship (CSIR, New Delhi, India): Apr. 2008 - Mar. 2011)

Additional Skills and Interests

Languages Known : Tamil (native), English (fluent in writing and speaking).

Computer Skills : PowerPoint, Word, Excel, ChemDraw, SciFinder Scholar, Reaxys and Web of Science.

Sports : Cricket, swimming, hiking.

Additional Activities

- Collaboration with Prof. D. Rambabu (ICT-IOC- Bhubaneswar, India) on biological studies: Jan. 2021 – Present
- Collaboration with Prof. D. Ragupathy (NITPY, India) on nanomaterial application studies: Nov. 2020 – Present
- Collaboration with Prof. Heinz Langhals (LMU, Germany) on material application studies and patents: Jan. 2013 – Dec. 2015.
- Collaboration with Prof. K. Karaghiosoff (LMU, Germany) on crystallographic and NMR studies: Jan. 2014 –Dec. 2015.
- Collaboration with Prof. Manivannan, V. Ponnuswamy, M. N. SubbiahPandi, A. on crystal studies: May 2006 – Dec. 2010.
- Teaching assistant in undergraduate lab courses; (lab courses to undergraduates and pre-university students).
- Research project supervision of B.Sc, M.Sc, Ph.D students: May 2006 – Present (India, Japan, Germany, Israel).

Top 5 Best Publications

1. Dhayalan, V.; *Dodke, V.S.; Pradeep Kumar, M.; Korkmaz, H.S.; Hoffmann-Röder, A.; Amaladass, P.; Dandela, R.; Dhanusuraman, R.; Knochel, P.* "Recent synthetic strategies for the functionalization of fused bicyclic heteroaromatics using organo-Li, -Mg and -Zn reagents" *Chemical Society Review*, **2024**, 53, 11045-11099.
2. †Gadekar, S. C.; †Dhayalan, V.; Zak, I. L.; Mizrahi, M. S.; Nandi, A.; Kozuch, S.; Milo, A. "Rerouting the organocatalytic benzoin reaction toward aldehyde deuteration" *ACS Catal.* **2021**, 11, 14561–14569. † = These authors contributed equally to this work.
3. Dhayalan, V.; Gadekar, S. C.; Alassad, Z.; Milo, A. "Unravelling mechanistic features of organocatalysis with *in situ* modifications at the secondary sphere" *Nat. Chem.* **2019**, 11, 543-551. (This paper was highlighted in *Science*, **2019**, 364, 967-768).
4. †Shen, Z-L.; †Dhayalan, V.; †Benischke, A.D.; Greiner, R.; Karaghiosoff, K.; Mayer, P.; Knochel, P. "Polyfunctional Lithium, Magnesium, and Zinc alkenyl reagents as building blocks for the synthesis of complex heterocycles" *Angew. Chem. Int. Ed.* **2016**, 55, 5332-5336. (This paper was highlighted in *Synfacts*, **2016**, 12, 680). † = These authors contributed equally to this work.
5. Dhayalan, V.; Sämann, C.; Knochel, P. "Synthesis of polyfunctional secondary amines by the addition of functionalized zinc reagents to nitroso-arenes" *Chem. Commun.* **2015**, 51, 3239-3242.

List of Publications

1. Dhayalan, V. Cooperative NHC and Photoredox Dual Catalysis for the Construction of Carbonyl Compounds, *ACS Omega* **2025**, Accepted
2. Dhayalan, V., Cooperative Triple Catalysis for Complex Molecule Construction and Late-Stage Functionalization" *Org. Biomol. Chem.* **2025**, Accepted
3. Dhayalan, V. "Visible-Light-Driven NHC and Organophotoredox Dual Catalysis for the Synthesis of Carbonyl Compounds" *Beilstein J. Org. Chem.* **2025**, 21, 2584–2603
4. Sharma, D.; Solanke, J. N.; Gat, S.; Dhayalan, V.; Dandela, R. "An alternative method for the efficient synthesis of aminoindane-based chiral triazolium salts" *ChemistrySelect*, **2025** (DOI: 10.1002/slct.70759).
5. Amaladass, P.; Lazer, A.; Thangaraju, K.; Dhayalan, V. " Synthesis and Applications of Functionalized Dibenzothiophene S,S-Dioxides in Optoelectronics and Bioimaging". *Eur. J. Org. Chem.* **2025**, e202500949
6. Solanke, J. N.; Sharma, D.; Patra, N.; Dandela, R.; Dhayalan, V. Recent advances in the synthesis and applications of thiocarbonyl compounds" *Eur. J. Org. Chem.* **2025** (DOI: 10.1002/ejoc.202500460R1)

7. Dhayalan, V. "Recent advances in strain-Release functionalization of [1.1.1]propellanes using organometallic reagents." *Synlett* **2025** (doi: 10.1055/a-2669-6239)
8. Solanke, J. N.; Vasanth, S.; Pradeep Kumar, M.; Vishnuvardhan, M.; Dhayalan, V.* Dandela, R." A green one-pot strategy for the direct synthesis of benzil" *Asian. J. Org. Chem.* **2025** (<https://doi.org/10.1002/202400568>)
9. Amaladass, P.; Dhanusuraman, R.; Lazer, A.; John, D.; Thangaraju, K.; Dhayalan, V. "A Comprehensive exploration of synthetic methods for functionalized benzo[c]thiophene derivatives and their material science applications". *Asian. J. Org. Chem.* **2025** (<https://doi.org/10.1002/ajoc.202500085>).
10. Annie, A.S.; Pradeep Kumar, M.; Adithya, R.; Vignesh, K.; Dhayalan, V.* "Recent synthetic strategies for the functionalization of indole and azaindole scaffolds" *Asian. J. Org. Chem.*, **2024** n/a, e202400694.
11. Gat, S.; Chatterjee, R.; Solanke, J.; Dhayalan, V.*; Rambabu Dandela R. "Mechanochemical synthesis of phosphoryl amides and esters from diphenylphosphoryl azides under mild conditions" *ChemistrySelect*, **2024**, 9, e202404882.
12. Ramarao, E. V. V. S.; Gat, S.; Chatterjee, R.; Solanke, J.; Dhayalan, V, Dandela, R. "NaIO₄/NH₂OH-mediated efficient synthesis of phosphoroamidates from anilines and triethyl phosphite" *Sustainability & Circularity NOW* **2024**, 1 a23865537.
13. Sharma, D.; Mahantesh G.; Pradeep Kumar, M.; Chatterjee, R.; Dandela, R.; *Dhayalan, V. "Efficient synthesis of hydrobenzoin through NHC catalysis: A sustainable approach for C-C bond formation" *ChemistrySelect*, **2024** 9, e202403882.
14. Dhayalan, V.* "Recent synthetic strategies of adamantyl Zn/Mg-organometallic reagents and further functionalization of adamantyl scaffolds" *ChemistrySelect*, **2024**, 9, e202403285.
15. Pradeep Kumar, M.; Annie, A.S.; Bind, V. K.; Adithya, R.; Amaladass, P.; Dhayalan, V.* "A review on functionalization of benzo-5,6-fused bicyclic heteroaromatic compounds" *Chemistry - An Asian Journal*, **2024** 19, e202400455.
16. Shivaji Ramarao, E.V.V.; Solanke, J.; Chatterjee, R.; Gat, S; Dhayalan, V.; Dandela, R. " Metal-free efficient synthesis of aryl sulfonamides from N hydroxy sulfonamide and amines" *Organic & Biomolecular Chemistry*, **2024**, 22, 5918-5923.
17. Sharma, D.; Chatterjee, R.; Dhayalan, V.; Dandela, R. "Metal-free oxidative coupling of aryl acetylene with elemental sulphur and amines: A facile access to α -ketothioamides" *Organic & Biomolecular Chemistry*, **2024**, 22, 5913-5917.
18. Pradeep Kumar, M.; Annie, A. S.; Solanke, J. N.; Dandela, R.; *Dhayalan, V. "A Comprehensive Review on Selective Catalytic Methods for Functionalization of Adamantane Scaffolds" *Asian. J. Org. Chem.* **2024** 13, e202400184.
19. *Dhayalan, V.; Dodke, V. S.; Sharma, D.; Dandela, R. "Recent advances in the preparation of air stable organozinc pivalates and their applications in organic synthesis" *Eur. J. Org. Chem.* **2024**, 27, e202301263.
20. Pradeep Kumar, M.; Mahantesh G.; Amaladass, P.; Manikandan, C.; *Dhayalan, V. "Recent synthetic strategies for the construction of functionalized carbazoles and their heterocyclic motifs enabled by Lewis acids" *RSC Advances*, **2023**, 13, 32596-32626.
21. Sharma, D.; Manikandan, C.; *Dhayalan, V.; Dandela, R.; "Mechanistic evaluation of benzoin catalysis enabled by triazolium salt application in the preparation of benzil and heterocycles" *ChemistrySelect*, **2023**, 8, e202303139.
22. Mahantesh G.; Sharma, D.; Dandela, R. *Dhayalan, V. "Synthetic strategies of N-heterocyclic olefin (NHOs) and their recent application of organocatalytic reactions and beyond" *Chem. Eur. J.* **2023**, 29, e202302106.
23. *Dhayalan, V.; Sharma, D.; Chatterjee, R.; Dandela, R. "Functionalization of pyridine and quinoline scaffolds using an organometallic Li-, Mg- and Zn- reagents" *Eur. J. Org. Chem.* **2023**, 26, e202300285.
24. Dhayalan, V. "Recent advances in organocatalytic methods for the synthesis of deuterated aldehydes" *Mini-Reviews in Organic Chemistry* **2023**, 20, 593-611.
25. Gaware, S.; Chatterjee, R.; Dhayalan, V.; Dandela, R. "Metal-free One-pot Synthesis of 2-Substituted Benzimidazoles from N-Aryl Imines and TMSN₃" *Tetrahedron Letters* **2023**, 115, 154289.
26. Chahal, P.; Madaswamy, S.; Lee, S. C.; Wabaidur, S. M.; Dhayalan, V.; Ponnusamy, V. K.; Dhanusuraman, R. "Nano-network of manganese oxide decorated polyaniline/graphitic-carbon nitride composite material for supercapacitor applications" *Fuel* **2022**, 330, 125531.

27. Madaswamy, S.; Vengadesan, K.; Wabaidur, S. M.; Islam, A.; Philips, M. F.; [Dhayalan, V.](#); Dhanusuraman, R. "One-pot electro-co-deposition of nanospherical polydiphenylamine-Palladium supported graphitic carbon nitride nanohybrid for efficient methanol oxidation" *Ionics*, **2022**, 28, 697-4708.
28. Sharma, D.; Chatterjee, R.; [*Dhayalan, V.](#); Dandela, R. "Recent advances in practical synthesis of C1 deuterated aromatic aldehydes enabled by catalysis and beyond" *Chemistry-An Asian Journal* **2022**, 17, e202200485
29. Sharma, D.; Chatterjee, R.; [*Dhayalan, V.](#); Dandela, R. "Recent advances in enantioselective organocatalytic reactions enabled by NHCs containing triazolium motifs" *Synthesis*, **2022**, 54, 4129-4166.
30. [*Dhayalan, V.](#); Dandela, R.; Bavya Devi, K.; Dhanusuraman, R. "Synthesis and applications of asymmetric catalysis using chiral ligands containing quinoline motifs" *SynOpen*, **2022**, 6, 31-57.
31. Sharma, D.; [Dhayalan, V.](#); Chatterjee, R.; Khatravath, M.; Dandela, R. "Recent advances in the synthesis of coumarin and its derivatives by using aryl propiolates" *ChemistrySelect*, **2022**, 7, 1-25.
32. †Gadekar, S. C.; †[Dhayalan, V.](#); Zak, I. L.; Mizrahi, M. S.; Nandi, A.; Kozuch, S.; Milo, A. "Mechanistic insights into NHC mediated isotope labelling of aromatic aldehydes" *ChemRxiv*, Oct. **2020** (<https://doi.org/10.26434/chemrxiv.13061717.v1>). † = These authors contributed equally to this work.
33. †Raed, A. A.; †[Dhayalan, V.](#); Barkai, S.; Milo, A. "N-Heterocyclic carbene triazolium salts containing brominated aromatic motifs: Features and synthetic protocol" *CHIMIA* **2020**, 74, 1-5. † = These authors contributed equally to this work.
34. [Dhayalan, V.](#); Mal, K.; Milo, A. "Practical synthesis of chiral N-heterocyclic carbene triazolium salts containing a hydroxy functional handle" *Synthesis*, **2019**, 51, 2845-2864. (Published as part of the *Bürgenstock special section 2018 future stars in organic chemistry*).
35. [Dhayalan, V.](#); Alcañiz, F. R.; Werner, V.; Karaghiosoff, K.; Knochel, P. "Preparation of a new spirobi[thieno[2,3-c]pyran] and its selective mono- and di-metalation. Application for the preparation of soluble conjugated oligothiophenes and pyrene derivatives" *Synthesis*, **2015**, 47, 3972-3982.
36. [Dhayalan, V.](#); Knochel, P. "Synthesis of polyfunctional secondary amines by the reaction of functionalized organomagnesium reagents with tertiary nitroalkanes" *Synthesis*, **2015**, 47, 3246-3256. (Highlighted in the "cover page").
37. Schlücker, T.; [Dhayalan, V.](#); Langhals, H.; Sämann, C.; Knochel, P. "Soluble adamantyl-substituted oligothiophenes with short fluorescence decay: An approach for ultra-fast optical signal processing" *Asian J. Org. Chem.*, **2015**, 4, 763-769.
38. Sämann, C.; [Dhayalan, V.](#); Schreiner, P. R.; Knochel, P. "Synthesis of substituted adamantylzinc reagents using a Mg-insertion in the presence of ZnCl₂ and further functionalizations" *Org. Lett.* **2014**, 16, 2418-2421.
39. [Dhayalan, V.](#); Murakami, R.; Hayashi, M. "Practical preparation of chiral keto-imine type *ONO* Schiff base ligands" *Tetrahedron Asymmetry*, **2013**, 24, 543-547.
40. [Dhayalan, V.](#); Murakami, R.; Hayashi, M. "Enantioselective alkynylation of trifluoromethyl ketones catalyzed by chiral Schiff bases" *Asian J. Chem.*, **2013**, 25, 7505-7508.
41. [Dhayalan, V.](#); Hayashi, M. "Synthesis of 2-arylbenzothiazole derivatives based on activated carbon/oxygen oxidation followed by Suzuki-Miyaura coupling" *Synthesis*, **2012**, 44, 2209-2216.
42. [Dhayalan, V.](#); Mohanakrishnan, A. K. "Lewis-acid mediated domino reaction of 3-bromomethylthiophenes with arenes/heteroarenes" *Synth. Commun.*, **2012**, 42, 2149-2160.
43. [Dhayalan, V.](#); Panchapakesan, G.; Mohanakrishnan, A. K. "One pot synthesis of 1-phenylsulfonyl-2-arylindoles" *Synth. Commun.*, **2012**, 42, 402-411.
44. Panchapakesan, G.; [Dhayalan, V.](#); Moorthy, N. D.; Saranya, N.; Mohanakrishnan, A. K. "Synthesis of 2-substituted 17β-hydroxy/17-methylene estratrienes and their *in vitro* cytotoxicity in human cancer cell cultures" *Steroids*, **2011**, 76, 1491-1504.
45. [Dhayalan, V.](#); Sureshbabu, R.; Mohanakrishnan, A. K. "Studies on Lewis-acid mediated domino reaction of N-protected bromomethylindoles with arenes/heteroarenes" *Indian J. Chem.* **2011**, 50B, 843-857.
46. Sureshbabu, R.; Saravanan, V.; [Dhayalan, V.](#); Mohanakrishnan, A. K. "Lewis acid-mediated one-pot synthesis of aryl/heteroaryl fused carbazoles involving a cascade Friedel-Crafts alkylation/electrocyclization/aromatization reaction sequence" *Eur. J. Org. Chem.*, **2011**, 922-935.
47. [Dhayalan, V.](#); Mohanakrishnan, A. K. "Lewis-acid mediated acetamidation of N-protected bromomethylindoles" *Indian J. Chem.*, **2010**, 49B, 327-334.
48. Ramesh, N.; [Dhayalan, V.](#); Sureshbabu, R.; Mohanakrishnan, A. K. "A facile preparation of methyl indolylacetates via Stille carbonylation of N-protected bromomethylindoles" *Indian J. Chem.*, **2009**, 48B, 858-864.

49. [Dhayalan, V.](#); Ramesh, N.; Mohanakrishnan, A. K. "Lewis acid mediated arylation of *N*-protected bromomethylindoles" *Synth. Commun.*, **2009**, 39, 1241-1256.
50. [Dhayalan, V.](#); Arul Clement, J.; Jagan, R.; Mohanakrishnan, A. K. "A versatile synthesis of annulated carbazole analogs involving a domino reaction of bromomethylindoles with arenes/heteroarenes" *Eur. J. Org. Chem.*, **2009**, 531-546.
51. *Mohanakrishnan, A. K.; [Dhayalan, V.](#); Arul Clement, J.; Balamurugan, R.; Sureshbabu, R.; Senthil Kumar, N. "A one pot synthesis of annulated carbazole analogs" *Tetrahedron Lett.*, **2008**, 49, 5850-5854.
52. Ramesh, N.; Prakash, C.; Sureshbabu, R.; [Dhayalan, V.](#); Mohanakrishnan, A. K. "Unusual dimerization of *N*-protected bromomethylindoles/benzyl bromide with arylmetal halides: Generation of indolylmethyl/benzyl radical" *Tetrahedron*, **2008**, 64, 2071-2079.

Patents

1. Langhals, H.; Knochel, P.; Schlücker, T.; Sämann, C.; [Dhayalan, V.](#) "Terminal substituted oligothiophenes and use thereof in optical signal transmission systems and/or as colour pigments" PCT/EP2015/054805 (WO/2015/135867). **17 September 2015**.

Crystal publications

In addition, I am a co-author of 41 crystal structure communications in a peer reviewed international journal *Acta Crystallographica Section E*. They originated from collaborations of my doctoral supervisor with several Indian crystallographic researchers (**Prof. A. Subbiah Pandi, Prof. V. Manivannan, Prof. G. Chakkaravarthi and Prof. M. N. Ponnuswamy**).

My contribution in all these communications: compound synthesis, growing single crystals suitable for the XRD analysis, writing of the experimental procedures to be included in the communication.

1. <i>Acta Cryst.</i> 2011 , E67, o2829.	2. <i>Acta Cryst.</i> 2011 , E67, o2797.	3. <i>Acta Cryst.</i> 2011 , E67, o1688.
4. <i>Acta Cryst.</i> 2011 , E67, o1460.	5. <i>Acta Cryst.</i> 2011 , E67, o1243.	6. <i>Acta Cryst.</i> 2011 , E67, o1242.
7. <i>Acta Cryst.</i> 2011 , E67, o844.	8. <i>Acta Cryst.</i> 2011 , E67, o741.	9. <i>Acta Cryst.</i> 2010 , E66, o3264.
10. <i>Acta Cryst.</i> 2010 , E66, o2957.	11. <i>Acta Cryst.</i> 2010 , E66, o2895.	12. <i>Acta Cryst.</i> 2010 , E66, o1509.
13. <i>Acta Cryst.</i> 2010 , E66, o1449.	14. <i>Acta Cryst.</i> 2010 , E66, o1071.	15. <i>Acta Cryst.</i> 2010 , E66, o954.
16. <i>Acta Cryst.</i> 2009 , E65, o2916.	17. <i>Acta Cryst.</i> 2009 , E65, o2906.	18. <i>Acta Cryst.</i> 2009 , E65, o2796.
19. <i>Acta Cryst.</i> 2009 , E65, o2733.	20. <i>Acta Cryst.</i> 2009 , E65, o2394.	21. <i>Acta Cryst.</i> 2009 , E65, o2241.
22. <i>Acta Cryst.</i> 2009 , E65, o2210.	23. <i>Acta Cryst.</i> 2009 , E65, o2209.	24. <i>Acta Cryst.</i> 2009 , E65, o1418.
25. <i>Acta Cryst.</i> 2009 , E65, o1020.	26. <i>Acta Cryst.</i> 2009 , E65, o847.	27. <i>Acta Cryst.</i> 2009 , E65, o825.
28. <i>Acta Cryst.</i> 2009 , E65, o464.	29. <i>Acta Cryst.</i> 2009 , E65, o440.	30. <i>Acta Cryst.</i> 2009 , E65, o12.
31. <i>Acta Cryst.</i> 2008 , E64, o1712.	32. <i>Acta Cryst.</i> 2008 , E64, o1667.	33. <i>Acta Cryst.</i> 2008 , E64, o1139.
34. <i>Acta Cryst.</i> 2008 , E64, o749.	35. <i>Acta Cryst.</i> 2008 , E64, o542.	36. <i>Acta Cryst.</i> 2008 , E64, o392.
37. <i>Acta Cryst.</i> 2007 , E63, o4724.	38. <i>Acta Cryst.</i> 2007 , E63, o4223.	39. <i>Acta Cryst.</i> 2007 , E63, o4134.
40. <i>Acta Cryst.</i> 2007 , E63, o3698.	41. <i>Acta Cryst.</i> 2007 , E63, o3673.	

Book Chapters

1. Sharma, D.; *[Dhayalan, V.](#); Manikandan, C.; Dandela, R. Book Name: Strategies Towards the Synthesis of Heterocycles and Their Applications (Chapter: Recent Methods for Synthesis of Coumarin Derivatives and Their New Applications *IntechOpen* **2022** (DOI: 10.5772/intechopen.108563).

Posters and Presentations

1. Presented a poster entitled "Synthesis of functionalized deuterated aromatic aldehydes organo-catalysed by *N*-Heterocyclic carbene (NHC)" [Dhayalan, V.](#); Zak, I. L.; Gadekar, S. C.; Milo, A., in joint 85th Annual Meeting of the Israel Chemical Society, February **18-19, 2020**, *Jerusalem, Israel*.
2. Presented a poster entitled "Enantioselective benzoin reaction catalyzed by *N*-Heterocyclic carbene boronic esters (NHC-BE)" [Dhayalan, V.](#); Gadekar, S. C.; Alassad, Z.; Milo, A., in joint 21st European Symposium on Organic Chemistry, July **14-18, 2019**, *Vienna, Austria*.
3. Presented a poster entitled "*N*-Heterocyclic carbene boronic esters (NHC-BE) for the formation of electron-withdrawing benzoin products" [Dhayalan, V.](#); Gadekar, S. C.; Milo, A., in joint 83rd Annual Meeting of the Israel Chemical Society, February **13-14, 2018**, *Tel Aviv, Israel*.
4. Presented a poster entitled "Enantioselective alkynylation of trifluoromethyl ketones catalyzed by chiral Schiff bases" [Dhayalan, V.](#); Murakami, R.; Hayashi, M., in joint Frontier meeting by young researcher, **25 December 2012**, Kobe University, *Kobe, Japan*.
5. Oral presentation entitled "Domino reaction of bromomethylindoles with arenes/heteroarenes" [Dhayalan, V.](#); Mohanakrishnan, A. K., in joint 5th J-NOST Conference for Research Scholars, **4-7 December 2009**, *IIT Kanpur, India*.

6. Presented a poster entitled "A one pot synthesis of annulated carbazole analogs involving a tandem reaction of bromomethylindoles with arenes/heteroarenes" [Dhayalan, V.](#); Arul Clement, J.; Mohanakrishnan, A. K., in joint 11th CRSI National Symposium in Chemistry, 6-8 February 2009, National Chemical Laboratory (NCL), [Pune, India](#).

Invited Talks

1. Talks entitled "Topics on Organic Reactive Intermediates" [Dhayalan, V](#) in joint National Workshop on DECODING CHEMISTRY HORIZONS organized by the Department of Chemistry at NIT Puducherry, Karaikal, India" on 30 Sept.- to 4 October 2024.
2. Talks entitled "Recent methods for the synthesis of biologically important heterocycles and chiral building blocks for industrial applications" [Dhayalan, V](#) in joint National Workshop organized by the Department of Chemistry at Karur Velalar College of Arts and Science for Women, Karur, Tamil Nadu" on 17 February 2024.
3. Talks entitled "Asymmetric synthesis of biologically important heterocycles and chiral building blocks for industrial applications" [Dhayalan, V](#) in joint Five Days Faculty Development Programme on Applied Science and Humanities, 14-18 December 2020, NIT Puducherry (NITPY), India.
4. Talks entitled "Chiral N-Heterocyclic Carbene Synthesis" [Dhayalan, V](#) in joint Thieme Chemistry- Synthesis Workshop on December 2021 (<https://www.youtube.com/watch?v=9u8TadH9OcQ>)

Organizing Skills for Conference & Seminars

1. International conference was organised by [Dhayalan, V](#) et al. has served as the organizing secretary for the international conference on emerging trends in synthetic organic chemistry-2021 (ICETSOC-2021) on 5-6 December 2021 conducted by National Institute of Technology Puducherry, Karaikal, India through virtual mode.

Personal Information

Full Name:

Researcher Identifier:



Dr. Vasudevan Dhayalan

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References

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