Chronological Data of Events

S.No	Academic Year 2024-25
1.	An international research article has been published by the centre on 05.08.2024
	NNO Pincer-Supported Pd(II)-Catalyzed Reductive N-Alkylation of Challenging Nitroarenes with Alcohols via Borrowing Hydrogen Strategy
	S. Pranesh Kavin, R. Ramesh*, S. Balaji J. Org. Chem. , 89(2024), 11161–11172 https://doi.org/10.1021/acs.joc.4c00621 IF :4.1; ISSN:
	1520-6904.
2.	An international research article has been published by the centre on 05.08.2024
	One-Pot Sustainable Synthesis of Highly Substituted Pyrimidines via Acceptorless Dehydrogenative Annulation of Alcohols Using Pincer Ni(II)-NNS Catalysts S. Clinton, R. Ramesh,* and Jan Grzegorz Malecki
	J. Org. Chem ., 89(2024), 11148–11160. https://doi.org/10.1021/acs.joc.4c00587 IF :4.1; ISSN:
	1520-6904.
3.	One of the Ph.D. scholars, Ms. S. Monika has presented her synopsis seminar on 29.05.2024.
	Title: Design, Synthesis and Structural Characterization of Binuclear Arene Ru(II) Complexes:
	Catalytic Organic Synthesis and Evaluation of Anticancer Properties
4.	An international research article has been published by the centre on 23.07.2024
	Analysis of Antiproliferative activity of New Half-sandwich Arene Ru (II) thiophene based aroylhydrazone complexes.
	P. Ramya, A. Abirami, and R. Ramesh* Dalton Trans .,53 (2024), 13469. https://doi.org/10.1039/D4DT01845A . IF : 4.0. ISSN: 1477-9234.
5.	The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, Arignar Anna Govt. Arts College, Musiri, April 2 nd , 2024.
6.	One of the Ph.D. scholars Mr.P.Anandaraj has completed Ph.D. viva-voce on 05.07.2024.
	Thesis Title: "Synthesis and structure of palladium(II) pincer-type complexes: catalytic application
	to C-N/ C-S bond formation via dehydrogenative coupling of alcohols".
	Academic Year 2023-24
7.	One of the Ph.D. scholars, Ms. A. Abirami has presented her synopsis seminar on 28.06.2024.
	Title: Mono- and Binuclear Organoruthenium(II) Complexes with N^O/N^S Chelating Ligands:
	Synthesis, Structural Confirmation and in vitro Anticancer Assessment"
8.	An international research article has been published by the centre on 01.06.2024
	Dinuclear arene ruthenium (II) arylthiourea complexes: Synthesis, structure, cancer cell growth inhibition and apoptosis induction studies. S. Balaji, M. K. M. Subarkhan, G. Balamurugan and R. Ramesh*

	Appl. Organomet. Chem. , 38 (2024), e7574. https://doi.org/10.1002/aoc.7574 IF :3.9; ISSN: 1099-0739.
9.	One of the Ph.D. scholars, Mr. S. Clinton has presented his synopsis seminar on 20.05.2024.
	Title: "Ni(II), Ru(II) and Pd(II) Mixed-Ligand Complexes: Sustainable Synthesis of Some N-
	heterocycles via Acceptorless Dehydrogenative Coupling of Alcohols"
10.	An international research article has been published by the centre on 09.04.2024
	Promoting the Anticancer Activity with Multidentate Furan-2-Carboxamide Functionalized Aroyl Thiourea Chelation in Binuclear Half-Sandwich Ruthenium(II) Complexes T. Sathiya Kamatchi, M.M. Khan and R. Ramesh*
	Inorg. Chem., 63 (2024), 7520–7539. https://doi.org/10.1021/acs.inorgchem.4c01265 . IF: 4.6. ISSN: 1520-510X.
11.	The coordinator of the centre Dr. R. Ramesh has delivered Invited lecture, Arignar Anna Govt.
	Arts College, Musiri, April 2 nd , 2024.
12.	The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, Cauvery college for
	women,Tiruchirappalli on Feb 28 th ,2024
13.	An international research article has been published by the centre on 13.02.2024
	Exploring the Cytotoxicity of Dinuclear Ru (II) p-cymene Complexes Appended N, N'-Bis (4-substituted benzoyl) hydrazines: Insights into the Mechanism of Apoptotic Cell Death A. Abirami, U. Devan, R. Ramesh*, A. Antony Joseph Velanganni, and J.G. Małecki, Dalton Trans. , 53 (2024) 5167 - 5179. https://doi.org/10.1039/D3DT04234K IF : 4.0. ISSN: 1477-
	9234.
14.	An international research article has been published by the centre on 07.02.2024
	Nickel Pincer Complexes Catalysed Sustainable Synthesis of 3,4-dihydro-2H-1,2,4-benzothiadiazine-1,1-dioxides via Acceptorless Dehydrogenative Coupling of Primary Alcohols P. Anandaraj and R. Ramesh* J. Org. Chem. , 89 (2024) 2494-2504 https://doi.org/10.1021/acs.joc.3c02508 IF :4.1; ISSN: 1520-6904.
15.	Dr. V.Tamilthendral has got awarded Institute Post-Doctoral Fellow, IIT, Guwahati in
	February 2024.
16.	The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, International Conference, PSG Krishnammal College, Coimbatore, Jan-29,2024
17.	One of the Ph.D. scholars Mrs. P. Ramya has completed Ph.D. viva-voce on 28.12.2023.
	Thesis Title: "Synthesis and Structural Characterization of Ru(II) and Ni(II) Aroylhydrazone
	Complexes: Studies on in vitro Anticancer Activity"
L	

The centre's get together function was held on 24.12.2023 at Ramya's hotel, Trichy. Bringing together old and current students of COMC for an enjoyable day.



- 19. The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, International Conference(MTIC-XX), IISC,Bangaluru, Dec14-17, 2023
- 20. The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, International Conference, Srimad Andavan Arts and Science College, 06-12- 2023.
- 21. An international research article has been published by the centre on 29.11.2023

Arene Ruthenium(II)-Catalyzed Sustainable Synthesis of 2,4-2 Disubstituted Quinazolines *via* Acceptorless Dual Dehydrogenative Coupling of Alcohols S. Saranya, V. Tamilthendral, P. Anandaraj, and R. Ramesh* **J. Org. Chem.**, 88 (2023) 16967–16977. https://doi.org/10.1021/acs.joc.3c01808; **IF**:4.1; ISSN: 1520-6904.

22. An international research article has been published by the centre on 12.10.2023

Naphthoyl Benzhydrazine - Decorated Binuclear Arene Ru(II) Complexes as Anticancer Agents Targeting Human Breast Cancer Cells

A. Abirami, U. Devan, R. Ramesh,* A. Antony Joseph Velanganni, and J G Małecki, **Dalton Trans**., 52 (2023), 16376-16387. https://doi.org/10.1039/D3DT02552G. **IF**: **4.56**; ISSN: 1477-9234.

23. One of the Ph.D. scholars, Mr. P.Anandaraj has presented his synopsis seminar on 13.09.2023.

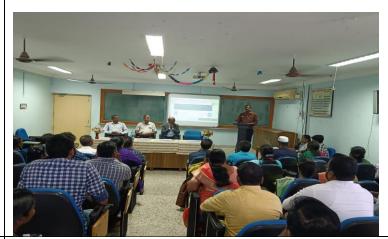
Title: Synthesis and Structure of Palladium(II) Pincer-Type Complexes: Catalytic Applications to C-N / C-S Bond Formation via Dehydrogenative Coupling of Alcohols"

24. An international research article has been published by the centre on 22.08.2023

N-alkylation of benzamides/sulfonamides using alcohols via borrowing hydrogen approach by well-defined Pd (II) pincer complexes

P. Anandaraj, and R. Ramesh*, **Appl. Organomet. Chem**. 2023; e7228. https://doi.org/10.1002/aoc.7228. IF:3.9; ISSN: 1099-0739.

25. The coordinator of the centre Dr. R. Ramesh has organised an SERB sponsored two days



workshop for college teachers titled" Fostering Research Culture" on Aug 18th & 19th - 2023.

- The coordinator of the centre Dr. R. Ramesh has delivered a Invited lecture, IFET College of Engineering, Villupuram on June 13th, 2023.
- A Book chapter has been published by the Coordinator of the centre on 06.06.2023
 R. Ramesh, Metal Carbonyls: Synthesis, Properties, and Structure, 87-105, Wiley-VCH GmbH,
 2023. https://doi.org/10.1002/9783527840946.ch5 ISBN: 978-3-527-84093-9.
- 28. An international research article has been published by the centre on 07.08.2023

 New dinuclear arene Ru(II) benzilbis(furoylhydrazone) complexes: synthesis, structure and anticancer activity

 S. Monika and R. Ramesh*, New. J. Chem., 47 (2023) 15622-15630.
- DOI: 10.1039/d3nj02869k; IF:3.3; ISSN: 1369-9261.

 29. An international research article has been published by the centre on 20.06.2023

Synthesis and Structure of Pd(II) Pincer Complexes: Catalytic Application to ß-Alkylation of Secondary Alcohols Involving Sequential Dehydrogenation of Alcohols via Borrowing Hydrogen Approach

S. Pranesh Kavin and R. Ramesh*, Dalton Trans., 52 (2023)10038-10044.

DOI: 10.1039/D3DT01628E; IF: 4.56; ISSN: 1477-9234.

Academic Year 2022-23

30. An international research article has been published by the centre on 31.05.2023

Arene Binuclear Ru(II)-Promoted Sustainable Synthesis of 2 Substituted Pyrazoles from Alcohols via Acceptorless Dehydrogenative Annulation V. Tamilthendral and R. Ramesh*, **Org. Lett.** 25(2023) 4162–4167.

https://doi.org/10.1021/acs.orglett.3c01452

31. An international research article has been published by the centre on 12.04.2023

Orthometallated Pd(II) C^N^S pincer complex catalyzed sustainable synthesis of bis(indolyl)methanes via acceptorless dehydrogenative coupling of alcohols

- S. Clinton, R. Ramesh* and J. G. Małecki, **Catal. Sci. Technol.** 13(2023)3358-3365. <u>DOI:</u> 10.1039/d3cy00333q
- 32. An international research article has been published by the centre on 22.03.2023

 Exploration of Antiproliferative Activity and Apoptosis Induction of

	New Nickel(II) Complexes Encompassing Carbazole Ligands P. Ramya, R. Ramesh,* T. Sathiya Kamatchi, and J. G. Małecki, ACS Omega , 8(2023) 12584–
	12591. https://doi.org/10.1021/acsomega.3c01252
33.	An international research article has been published by the centre on 01.02.2023
	Direct synthesis of benzimidazoles by Pd(II) N^N^S-pincer type complexes via acceptorless dehydrogenative coupling of alcohols with diamines P.Anandaraj, R.Ramesh* and J.G. Malecki, J. Organomet. Chem. , 985(2023)122577. https://doi.org/10.1016/j.jorganchem.2022.122577
34.	A research grant of Rs. 68 L has been received from ICMR on 05.01.2023 for the project, "Development of new arene ruthenium(II) complexes as potential DDR inhibitor targeting ATM and ATR DNA repair pathways in cervical cancer".
35.	A research grant of Rs. 34.5 L has been received from SERB on 25.12.2022 for the project, "Pincer supported nickel(II) catalysed sustainable synthesis of N-heterocyclic compounds via acceptorless dehydrogenative coupling strategy".
36.	One of the Ph.D. scholars Mr. V.Tamilthendral has completed Ph.D. viva-voce on 21.12.2022. Thesis Title: "New Mono and Binuclear Ru(II) Complexes of O, N, S Donor Ligands: Catalytic Applications to C-C, C-N and C-O Coupling Reactions"
37.	An international research article has been published by the centre on 13.12.2022 One-pot synthesis of 1,3-disubstituted imidazo[1,5-a]pyridines via acceptorless dehydrogenative coupling of primary alcohols promoted by binuclear ruthenium(II) N^O-chelating complexes S. Monika and R. Ramesh*, Appl. Organometal. Chem., 37(2022) e6986. https://doi.org/10.1002/aoc.6986 IF: 4.105; ISSN: 1099-0739.
38.	Dr. S. Balaji has got awarded SERB- National Post-Doctoral Fellow, IIT, Guwahati in November 2022.
39.	An international research article has been published by the centre on 17.10.2022 New ruthenium(II) catalysts enable the synthesis of 2-amino-4H-chromenes using primary alcohols via acceptorless dehydrogenative coupling V. Tamilthendral, R. Ramesh* and J.G. Malecki, <i>New. J. Chem.</i> , 2022 https://doi.org/10.1039/d2nj03268f , IF :3.925; ISSN: 1369-9261
40.	The coordinator of the centre Dr. R. Ramesh has delivered a special lecture at UGC-HRDC, Bharathiar University, Coimbatore on 14.10.2022.
41.	The coordinator of the centre Dr. R. Ramesh was honoured by Honourable Vice-Chancellor and Registrar for highest "h-index" in Bharathidasan University, Tiruchirappalli on Teachers' day celebration 05.09.2022



42. An international research article has been published by the centre on 01.09.2022

Impact of Biphenyl Benzhydrazone-Incorporated Arene Ru(II) Complexes on Cytotoxicity and the Cancer Cell Death Mechanism

A. Abirami, R. Ramesh*, U. Devan and A.A.J. Velanganni, *Organometallics*, 2022, 41(17), 2474-2486. https://doi.org/10.1021/acs.organomet.2c00290, IF: 3.876; ISSN: 1099-0739.

- 43. An international research article has been published by the centre on 15.08.2022

 Arene Ru (II)-catalyzed facile synthesis of N-acylhydrazones via acceptorless dehydrogenative coupling strategy
 - S. Saranya, R. Ramesh*, P. Anandaraj and D. Semeril, *Appl. Organomet. Chem.*,2022, 36(10)e6857. https://doi.org/10.1002/aoc.6857, IF: 4.105; ISSN: 1099-0739.
- 44. The coordinator of the centre Dr. R. Ramesh has delivered a special lecture at Pondicherry University, Pondicherry on 04.06.2022.

Academic Year 2021-22

45. One of the Ph.D. scholars, Mr. V. Tamilthendral has presented his synopsis seminar on 26.05.2022.

Title: New Mono and Binuclear Ru(II) Complexes of O, N, S Donor Ligands: Catalytic Applications to C-C, C-N and C-O Coupling Reactions

- 46. An international research article has been published by the centre on 20.05.2022
 - NNO Pincer Ligand-Supported Palladium(II) Complexes: Direct Synthesis of Quinazolines via Acceptorless Double Dehydrogenative Coupling of Alcohols
 - S. Balaji, R. Ramesh* and David Semeril, Organometallics., 41(11) (2022) 1314.

DOI: https://doi.org/10.1021/acs.organomet.2c00062; IF: 3.876; ISSN: 1099-0739.

47. An international research article from the centre has been accepted by Wiley Online Library on 19.04.2022

Concise Access to Perimidines by Palladium (II) Complexes via Acceptorless Dehydrogenative Coupling of Alcohols

S. Clinton, R. Ramesh*, J. G. Małecki, Appl. Organometal. Chem., 2022.

IF: 4.105; ISSN: 1099-0739.

48. One of the Ph.D. scholars S. Balaji has completed Ph.D. viva-voce on 04.04.2022.

Thesis Title: "Ru(II)-arene and Pd(II) Complexes Comprising Aroylhydrazone and Thiourea Ligands: Synthesis, Structural Elucidation, Biological and Catalytic Investigations".



- 49. The coordinator of the centre Dr. R. Ramesh has delivered a special lecture at Two days Conference Sponsored by TANSCHE held at Arignar Anna Govt. Arts College, Musiri on 29.03.2022.
- 50. The coordinator of the centre Dr. R. Ramesh has delivered medal lecture and received National level Bronze medal at 28th CRSI's National symposium on chemistry held at Indian Institute of Technology, Guwahati on 26.03.2022.





- 51. Two Ph.D. scholars of the centre, V. Tamilthendral and P. Anandaraj have presented papers in the international virtual conference on "Recent Innovations in Chemical Sciences (RICS 2022)" held during 24-25, March 2022 in the department of chemistry, Periyar University, Salem.
- 52. An international research article has been published by the centre on 03.01.2022

 N^N^O Hydrazone Capped Pincer Type Palladium Complex Catalysed Construction of

Quinazolinones from Alcohols

P. Anandaraj, **R. Ramesh*** and T. Sathiya Kamatchi, *Inorg. Chem. Commun.*, 137 (2022) 109190. DOI: https://doi.org/10.1016/j.inoche.2021.109190; **IF**: 2.495; ISSN: 1387-7003.

53. An international research article has been published by the centre on 03.01.2022

Ru(II)-NNO pincer-type complexes catalysed E-olefination of alkyl-substituted quinolines/pyrazines utilizing primary alcohols Using Benzyl Alcohols via Acceptorless Dehydrogenative Coupling Reaction,

V. Tamilthendral, **R. Ramesh*** and G. Malecki, *Appl. Organomet. Chem.*, 2021, e6561. https://doi.org/10.1002/aoc.6561; **IF**: 4.105; ISSN: 1099-0739.

54. The coordinator of the centre Dr. R. Ramesh has received a national-level UGC-BSR Mid-Career award and a research grant of Rs. 10 L.

2 BDU faculty receive award

PECIAL CORRESPONDENT TIRUCHI

Two faculty members of Bharathidasan University (BDU), R. Ramesh, Professor and Chair, School of Chemistry, and S. Sivaramakrishnan, Professor and Head, Department of Biotechnology, have been selected for the UGC-BSR Mid-Career Award for 2021.

The University Grants Commission grants the award to faculty members who have successfully supervised 15 Ph.D. candidates, including five who received their degrees during the preceding five years along with successful completion of five sponsored research projects by national/international funding agencies.

The UGC provides a grant of ₹10 lakh to the awardees to support their research development, a press release by BDU said.



55. An international research article has been published by the centre on 08.11.2021

Nickel(II)-Catalyzed Selective (E)-olefination of Methyl Heteroarenes, G. Balamurugan and R.

	Ramesh*, ChemCatChem., 2021, 13, 1-9. https://doi.org/10.1002/cctc.202101455 , IF: 5.686; ISSN: 1867-3880.
56.	An international research article has been published by the centre on 08.11.2021
	Assessment of Antiproliferative activity of New Half-sandwich Arene Ru(II) furylbenzhydrazone complexes
	P. Ramya, R. Ramesh* , U. Devan, A.A.J. Velanganni and J. G. Małecki,
	Appl. Organomet. Chem., 2021; e6512. https://doi.org/10.1002/aoc.6512, IF: 4.105; ISSN :1099-0739.
57.	Dr. G. Balamurugan has got awarded UGC -Kothari Post-Doctoral Fellow, University of Hyderabad in October 2021.
58.	An international research article has been published by the centre on 06.08.2021
	Palladium(II) N,N,O-Pincer Type Complexes Mediated Dehydrogenative Coupling of Alcohols to Quinazolines
	P. Anandaraj, R. Ramesh * and P. Kumaradhas, <i>New. J. Chem.</i> , 2021, 45, 16572-16580. https://doi.org/10.1021/acs.organomet.0c00814; IF : 3.876; ISSN:1099-0739.
59.	Three Ph.D. research scholars, S.Clinton, A. Abirami and S. Monika of the centre have selected as "Project Fellow" under RUSA 2.0 project on 26.07.2021.
	Academic Year 2020-21
60.	One of the Ph.D. scholars S. Saranya has completed Ph.D. viva-voce on 25.03.2021.
	Thesis Title: "Mono and Dinuclear organo ruthenium (II) complexes: Versatile catalysts for C-N bond formation via dehydrogenation of alcohols".
61.	An international research article has been published by the centre on 04.03.2021
	Palladium(II) N^O Chelating Complexes Catalyzed One-pot Approach for Synthesis of
	Quinazolin-4(3H)-ones via Acceptorless Dehydrogenative Coupling of Benzyl alcohols and 2-Aminobenzamide
	S. Balaji, G. Balamurugan, R. Ramesh* and D. Semeril, <i>Organometallics</i> , 2021, 40, 6, 725–734. https://doi.org/10.1021/acs.organomet.0c00814 ; IF : 3.876; ISSN: 1099-0739.
62.	A research project entitled "Development of advanced multifunctional semiconductors and organic-inorganic hybrid nanomaterials for green and clean energy technology sources" with the research grant of Rs. 16 L has been received from RUSA 2.0 on 10.02.2021.
63.	The coordinator of the centre Dr. R. Ramesh has been elected as Fellow, Royal Society of Chemistry, UK on 26.01.2021
64.	An international research article has been published by the centre on 13.12.2020
	Arene Diruthenium(II) Mediated Synthesis of Imines from Alcohols and Amines Under Aerobic

	V. Tamilthendral, R. Ramesh* and G. Malecki, Appl. Organomet. Chem., 2020; e6122.
	Doi.org/10.1002/aoc.6122, IF :4.105; ISSN:1099-0739
65.	National Workshop on "Advances in Chemical Sciences" from 02.11.2020 to 07.11.2020 for "National Chemistry Week has been organized by Dr. R. Ramesh and Chemical Research
	Society of India (CRSI) at various colleges around Trichy and Madurai. A total of 700 students have benefitted by the workshop.
66.	An international research article has been published by the centre on 21.08.2020
	Non-pincer-type Arene Ru(II) Catalysts for the Direct Synthesis of Azines from Alcohols and Hydrazine under Aerobic Conditions
	S. Saranya, R. Ramesh* and D. Semeril, <i>Organometallics</i> , (2020) 39, 17, 3194-3201. DOI:.10.1021/acs.organomet.0c00367, IF :3.876; ISSN: 1099-0739.
67.	One of the Ph.D. scholars G. Balamurugan has completed Ph.D. viva-voce on 07.08.2020
	Thesis Title: Ruthenium (II) and Nickel (II) complexes featuring N-heterocyclic carbene, aroylhydrazone and thiourea ligands: Synthesis, structural characterization and catalytic applications
68.	An international research article has been published by the centre on 21.07.2020
	Investigations on Antiproliferative Activity and Apoptosis Mechanism of New Arene Ru(II)
	Carbazole based Hydrazone Complexes
	T. Sathiya Kamatchi, M.M. Khan, R. Ramesh*, H. Wang and G. Malecki,
	Dalton Trans., 49 (2020), 11385, DOI: 10.1039/D0DT01476A; IF: 4.174; ISSN: 1477-9234.
•	
69.	The coordinator of the centre Dr. R. Ramesh has received a National level Bronze Medal from
69.	The coordinator of the centre Dr. R. Ramesh has received a National level Bronze Medal from Chemical Research Society of India, (CRSI) on 16.07.2020.
69.	
69. 70.	Chemical Research Society of India, (CRSI) on 16.07.2020.
	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20
	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020
	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via
	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction,
	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction, G. Balamurugan, R. Ramesh* and G. Malecki, J. Org. Chem., 85 (2020)7125.
70.	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction, G. Balamurugan, R. Ramesh* and G. Malecki, <i>J. Org. Chem.</i> , 85 (2020)7125. DOI: 10.1021/acs.joc.0c00530; IF: 4.335; ISSN:1520-6904.
70.	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction, G. Balamurugan, R. Ramesh* and G. Malecki, J. Org. Chem., 85 (2020)7125. DOI: 10.1021/acs.joc.0c00530; IF: 4.335; ISSN:1520-6904. An international research article has been published by the centre on 08.04.2020 Synthesis and Structure of Arene Ru(II) N^O-Chelating Complexes: In Vitro Cytotoxicity and
70.	Chemical Research Society of India, (CRSI) on 16.07.2020. Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction, G. Balamurugan, R. Ramesh* and G. Malecki, J. Org. Chem., 85 (2020)7125. DOI: 10.1021/acs.joc.0c00530; IF: 4.335; ISSN:1520-6904. An international research article has been published by the centre on 08.04.2020 Synthesis and Structure of Arene Ru(II) N^O-Chelating Complexes: In Vitro Cytotoxicity and Cancer Cell Death Mechanism,
70.	Academic Year 2019-20 An international research article has been published by the centre on 08.05.2020 Nickel(II) – N^N^O Pincer Type Complexes Catalyzed N-alkylation of Amines with Alcohols via Hydrogen Auto Transfer Reaction, G. Balamurugan, R. Ramesh* and G. Malecki, <i>J. Org. Chem.</i> , 85 (2020)7125. DOI: 10.1021/acs.joc.0c00530; IF: 4.335; ISSN:1520-6904. An international research article has been published by the centre on 08.04.2020 Synthesis and Structure of Arene Ru(II) N^O-Chelating Complexes: In Vitro Cytotoxicity and Cancer Cell Death Mechanism, S. Balaji, M.M. Khan, R. Ramesh*, H. Wang and D. Semeril, <i>Organometallics</i> , 39 (2020) 1366.

(ACS) on 09.12.2019. A total of 275 participants have benefited by the workshop. An international research article has been published by the centre on14.10.2019 Efficient construction of C-C bonds from aryl halides/aryl esters with arylboronic acids catalysed by palladium(II) thiourea complexes T.S. Manikandan, R. Ramesh* and G. Malecki, Appl. Organomet. Chem., DOI:10.1002/aoc.5181; IF:3.259: ISSN:1099-0739 74. A research grant of Rs. 10 L has been received from SERB on 17.09.2019 for the project, "Development of organo ruthenium catalysts for direct synthesis of amides and amines/imines". 75. Dr. S. Muthumari has got selected as a Post-Doctoral Fellow at West Virginia University, USA on 20.08.2019 76. One of the Ph.D. scholars N. Mohan has completed Ph.D. viva-voce on 18.07.2019. Thesis Title: "Ruthenium(II) arene and Ni(II) Complexes Encompassing Schiff base ligands: Synthesis, Structural Characterization, Catalytic and Biological Investigations". Academic Year 2018-19 Dr. T. S. Manikandan has joined as a Post-Doctoral Fellow at IIT, Guwahati on 31.05.2019 78. One of the Ph.D. scholars S. Muthumari has completed Ph.D. viva-voce on 02.05.2019. Thesis Title: Palladium(II) and Ruthenium(II) Complexes Containing Multidentate Ligands: Synthesis, Structural Characterization and Catalytic Applications 79. One of the Ph.D. scholars T.S. Manikandan has completed Ph.D. viva-voce on 24.05.2019 Thesis Title: Ruthenium(II) and Palladium(II) Complexes Featuring Aroylhydraone and Thiourea Ligands: Synthesis, Structural Characterization and Catalytic Applications An international research article has been published by the centre on 25.04.2019 through international collaborative research with Prof. David Semeril, University of Strasbourg, France Synthesis of the First Resorcin[4]arene-Functionalized Triazolium Salts and their Use in Suzuki Miyaura Cross-Coupling Reactions D. Sémeril,* D. Matt and R. Ramesh, Catalysts, 9 (2019) 388. DOI: 10.3390/catal9040388; IF:3.444; ISSN:2073-4344 81. A special lecture has been delivered by Prof. Pierre H. Dixneuf, Emeritus Professor, University of Rennes, France on 06.03.2019 at the centre. A total of 125 students and scholars have benefited

	by the scientific lecture.
82.	Dr. R. Raj Kumar has joined as a Post-Doctoral Fellow at Xian Jiatong University, China on 01.03.2019
83.	An international research article has been published by the centre on 09.01.2019 through international collaborative research with Prof. David Semeril, University of Strasbourg, France Synthesis of the First Resorcin[4]arene-Functionalized Triazolium Salts and Their Use in Suzuki Miyaura Cross-Coupling Reactions D. Sémeril,* D. Matt and R. Ramesh, Catalysts, 9 (2019) 388.
	DOI: 10.3390/catal9040388; IF :3.444; ISSN:2073-4344
84.	An international research article has been published by the centre on 21.12.2018 The Tandem C-H/N-H Activation of N-Methyl Arylamide Catalyzed by Dinuclear Pd(II) Benzhydrazone Complex: A Concise Access to Phenanthridinone T.S. Manikandan, R. Ramesh* and D. Semeril, Organometallics, 38 (2019) 319. DOI:10.1021/acs.organomet.8b00714; IF:4.100; ISSN: 1520-6041
85.	An international research article has been published by the centre on 19.11.2018 Synthesis and Structures of Arene Ruthenium(II)-NHC complexes: Efficient catalytic α- alkylation of ketones via hydrogen auto transfer reaction. G. Balamurugan, S. Balaji, R. Ramesh* and N. Bhuvanesh, <i>Appl. Organomet. Chem.</i> , DOI:10.1002/aoc.4696; IF :3.259; ISSN:1099-0739.
86.	The coordinator of the centre Dr. R. Ramesh has received national-level Tamil Nadu Scientist Award (TANSA), 2016 on 30.10.2018 from Tamil Nadu State Council for Science and Technology (TNSCST), Government of Tamil Nadu

87. An international research article has been published by the centre on 03.10.2018

Synthesis and structure of arene ruthenium(II) complexes: one pot catalytic approach to synthesis of bioactive quinolines under mild condition

S. Muthumari, S. Saranya and R. Ramesh*, Appl. Organomet. Chem.,

DOI: 10.1002/aoc.4582; IF: 3.259; ISSN:1099-0739

88. An international research article has been published by the centre on 02.10.2018 through international collaborative research with Prof. David Semeril, University of Strasbourg, France Chiral calixarene and resorcinarene derivatives: Conical cavities substituted at their upper rim by two phosphito units and their uses as ligands in Rh- catalysed hydroformylation

N. Natarajan, M. Pierrevekin, D. Semeril, C. Bauder, D. Matt and R. Ramesh, Catalysis

Commun., 118 (2019) 70–75. DOI: 10.1016/j.catcom.2018.09.020; IF: 3.674; ISSN: 1566-7367.

89. A Research grant of Rs. 6 L has been received from SERB on 29.08.2018 for the project, "Development of organo ruthenium catalysts for direct synthesis of amides and amines/imines".

90. The coordinator of the centre Dr. R. Ramesh has organised an International conference on sustainable energy technologies (i-SET 2018) on 27.06.2018 & 28.06.2018. A total of 400 participants have benefited by the workshop.



Academic Year 2017-18

91. An international research article has been published by the centre on 24.03.2018
Synthesis and structure of Ru(II) complexes of thiosemicarbazones: Highly selective catalysts for oxidation of olefins to aldehydes

S. Muthumari and R. Ramesh*, ChemistrySelect 3 (2018) 3036–3041.

DOI: 10.1002/slct.201800163; IF: 1.716; ISSN:2365-6549

92. An international research article has been published by the centre on16.03.2018

Synthesis and structure of arene ruthenium(II) benzhydrazone complexes: Antiproliferative

	activity, apoptosis induction and cell cycle analysis
	R. Raj Kumar, R. Ramesh* and G. Malecki, <i>J. Organomet. Chem.</i> , 862 (2018) 95-104.DOI:
	10.1016/j.jorganchem.2018.03.013; IF : 2.173; ISSN: 0022-328X
	10.1010/j.jorganchem.2016.03.013, I F. 2.173, 133N. 0022-326X
93.	An international research article has been published by the centre on 06.02.2018
	Direct aerobic strategy for selective synthesis of imines via alcohols and amines promoted by
	ruthenium(II) (η ⁶ -cymene) complexes
	T. S. Manikandan, S. Naveen, N. Loknath and R. Ramesh *, <i>ChemistrySelect</i> , 3 (2018) 1561-
	1568.DOI:10.1002/slct.201800083; IF : 1.716; ISSN:2365-6549
94.	An international research article has been published by the centre on16.01.2018
	Synthesis, antiproliferative activity and apoptosis promoting effects of arene Ru(II) complexes with
	N, O chelating ligands
	N. Mohan, M.M. Khan and R. Ramesh *, <i>J. Organomet. Chem.</i> , 859 (2018) 124-131. DOI:
	10.1016/j.jorganchem.2018.01.022; IF : 2.173; ISSN: 0022-328X
95.	An international research article has been published by the centre on 26.12.2017
95.	
	Synthesis and structure of new binuclear ruthenium(II) arene benzyl bis(benzoylhydrazone) complexes:
	Investigation on antiproliferative activity and apoptosis induction
	M. Subarkhan, S. Saranya, and R. Ramesh* , <i>Inorg. Chem. Front.</i> , 5 (2018) 585.
	DOI:10.1039/C7QI00761B; IF : 5.934 ; ISSN: 2409-3424
96.	An international research article has been published by the centre on12.12.2017 through
	international collaborative research with Prof. David Semeril, University of Strasbourg, France
	Cavitand chemistry: nickel half-sandwich complexes with imidazolylidene ligands bearing one or
	two resorcinarenyl substituents
	N. Natarajan, T. Chavagnan, D. Sémeril*, E. Brenner, D. Matt, R. Ramesh, and L. Toupet, <i>Eur. J.</i>
	Inorg. Chem., (2018) 890–896.DOI: 10.1002/ejic.201701143; IF :2.578; ISSN:1099-0682
	morg. Chem., (2016) 690–690. <u>DOI. 10.1002/ejic.201701143</u> , IF.2.376, 133N.1099-0062
97.	One of the Ph.D. scholars R. Raj Kumar has completed Ph.D. viva-voce on 28.11.2017
	Thesis Title: Ni(II) and Ru(II) Complexes Containing Thioamide and Schiff base
	Ligands: Syntheses, Structures and in vitro Biological Applications
98.	A Special lecture on "Synthetic methods based on organometallics, chiral reagents and renewable
30.	resources" has been delivered by Prof. M. Periasamy , FNA , FASc , Professor, University of
	Hyderabad, Hyderabad, India at the centre on 17.11.2017. A total of 120 students and scholars
	have benefited by the scientific lecture.

	Pathways in Aronatic Ostdation: SET Mechanism Ph Cet* Ph 3- Se Or Anodic Ph Ph Ph *2H,OSH OP Ph *2H,OSH OP Relationship to the NIH Shift Mechanism With Privitation M Virialization (INS SIN) The Nonclassical for Problem: or Bridging with Scoordinated CN (I) Evidence and Conclusion (1975-197)
99.	An international research article has been published by the centre on 17.11.2017
	Cyclometalated Ru(II)-NHC complexes as effective catalysts for transfer hydrogenation: Influence
	of wingtip group on catalytic outcomes
	G. Balamurugan, R. Ramesh* and G. Małecki., <i>ChemistrySelect</i> , 2 (2017) 10603.
400	DOI: <u>10.1002/slct.201702102</u> ; IF : 1.716; ISSN:2365-6549
100.	Dr. S. M. Subarkhan has joined as a Post-Doctoral Fellow at Zhejiang University, PR China on 01.11.2017
101.	An international research article has been published by the centre on 20.10.2017
	One-pot catalytic approach for the selective aerobic synthesis of imines from alcohols and amines
	using efficient arene diruthenium(II) catalysts under mild condition S. Saranya, R. Ramesh * and G. Małecki., <i>Eur. J. Org. Chem.</i> , (2017) 6726.
	DOI:10.1002/ejoc.201701408; IF :2.578; ISSN:1099-0682
102.	
102.	Thesis Title: Synthesis and characterization of Cu(II) and arene Ru(II) complexes featuring
	multidentate ligands: Investigations on antiproliferative activity and apoptosis induction
103.	An international research article has been published by the centre on 28.07.2017
	Versatile coordination ability of thioamide ligand in Ru(II) complexes: synthesis, computational
	studies, in vitro anticancer activity and apoptosis induction
	R. Raj Kumar, R. Ramesh* and G. Malecki, <i>New. J. Chem.</i> , 41 (2017) 9130.
	DOI:10.1039/C7NJ01828B; IF : 3.069 ; ISSN: 1369-9261
104.	,
	Engineering Research Board (SERB) for the project "Development of organoruthenium catalysts for direct synthesis of amides and amines/imines".
	Academic Year 2016-17
105.	An international research article has been published by the centre on18.12.2016
	Synthesis and structural characterization of Pd(II) thiosemicarbazonato complex: catalytic

	evaluation in synthesis of diaryl ketones from aryl aldehydes and arylboronic acids
	R. N. Prabhu and R. Ramesh*, Tetrahedron Lett., 58 (2017) 405.
	DOI: <u>10.1016/j.tetlet.2016.12.032</u> ; IF : 2.379; ISSN: 0040-4020
106.	A research grant of Rs. 8.73 L has been received as 3 rd instalment from CEFIPRA (Indo-French) on 22.11.2016 through international collaborative research with Prof. David Semeril, University of Strasbourg, France
	Project Title: Influences of the resorcin[4] arene on the catalytic outcomes (2014-17)
107.	An international research article has been published by the centre on 17.11.2016 Transfer hydrogenation of ketones catalyzed by half-sandwich (η ⁶ -p-cymene) ruthenium(II) complexes incorporating benzoylhydrazone ligands N. Mohan, S. Muthumari and R. Ramesh *, <i>Appl. Organomet. Chem.</i> , 31(2017) 3648. DOI: 10.1002/aoc.3648; IF :3.259; ISSN:1099-0739
108.	An international research article has been published by the centre on 05.11.2016 Ru(II) carbazole thiosemicarbazone complexes with four membered chelate ring: Synthesis, molecular structures and evaluation of biological activities R. Raj Kumar, R. Ramesh* and G. Malecki, <i>J. Photochem.Photobiol B: Biol.</i> 165 (2016) 310.DOI: 10.1016/j.jphotobiol.2016.10.039; IF: 4.067; ISSN:1011-1344
109.	An international research article has been published by the centre on 27.10.2016 Steric control on the coordination behaviour of carbazole thiosemicarbazones towards [RuH(Cl)(CO)(AsPh ₃) ₃]: A combined experimental and theoretical study R. Raj Kumar, R. Ramesh* and G. Malecki, <i>New. J. Chem.</i> , 40 (2016) 10084. DOI:10.1039/C6NJ02430K; IF: 3.069; ISSN: 1369-9261
110.	An international research article has been published by the centre on 19.10.2016 Synthesis and molecular structure of arene ruthenium(II) benzhydrazone complexes: Impact of substitution at chelating ligand and arene moiety on antiproliferative activity M. Mohamed Subarkhan, R. Ramesh*, Y. Liu, New J. Chem., 40 (2016) 9813. DOI:10.1039/C6NJ01936F; IF: 3.069; ISSN: 1369-9261
111.	An international research article has been published by the centre on 11.10.2016 Synthesis and characterization of cycloruthenated benzhydrazone complexes: Catalytic applications to selective oxidative cleavage of olefins to aldehyde. T.S. Manikandan, R. Ramesh*, D. Semeril, RSC Adv., 6 (2016) 97107. DOI:10.1039/C6RA19044H; IF: 3.049; ISSN: 2046-2069
112.	An international research article has been published by the centre on 14.10.2016 Square-planar Ni(II) thiosemicarbazonato complex as an easily accessible and convenient

	catalyst for Sonogashira cross-coupling reaction
	R. N. Prabhu and R. Ramesh*, Tetrahedron Lett., 57 (2016) 4893.
	DOI: <u>10.1016/j.tetlet.2016.09.049</u> ; IF : 2.379; ISSN: 0040-4020
113.	An international research article has been published by the centre on 23.08.2016
	Ruthenium(II) Arene Complexes Containing Benzhydrazones: Synthesis, structure and Antiproliferative Activity
	M. Mohamed Subarkhan, S. Saranya and R. Ramesh* , <i>Inorg. Chem. Front.,</i> 3(2016) 1245. DOI: 10.1039/C6QI00197A; IF : 5.934; ISSN: 2409-3424
114.	An international research article has been published by the centre on 07.07.2016 Synthesis and catalytic evaluation of ruthenium(II) benzhydrazone complex in transfer hydrogenation of ketones T. S. Manikandan, S. Saranya, R. Ramesh*, <i>Tetrahedron Lett.</i> , 57 (2016) 3764. DOI:10.1016/j.tetlet.2016.07.020; IF: 2.379; ISSN: 0040-4020
115.	A research grant of Rs. 32 L has been sanctioned by Science and Engineering Research Board (SERB) on 09.06.2017 for the research project entitled "Development of organo ruthenium catalysts for direct synthesis of amides and amines/imines"