# **Faculty Profile**



Dr. N. Devika Assistant Professor in Chemistry

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Qualification : M.Sc., M.Phil., Ph.D

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## **Educational Oualification:**

- ❖ Doctor of Philosophy (Ph.D) in the field of Organometallic Chemistry, Bharathidasan University, Tiruchirappalli.
- ❖ Master of Philosophy (M.Phil.,) in Chemistry, Bharathidasan University, Tiruchirappalli.
- ❖ Master of Science (M.Sc.,) in Chemistry, A.V.V.M Sri Pushpam College, Thanjavur, Affiliated to Bharathidasan University, Tiruchirappalli.
- ❖ Bachelor of Science (B.Sc.,) in Chemistry, Kunthavai Naachiyar Government Arts and Science College, Thanjavur, Affiliated to Bharathidasan University, Tiruchirappalli.

# **Teaching Experience: (16 Years)**

- ❖ Assistant Professor in BIT Campus, Anna University, Tiruchirappalli from 2010 to till date.
- ❖ Lecturer in Anna University of Technology, Tiruchirappalli from 2007 to 2010.
- Lecturer in Tamizhavel Umamaheswarar Karanthai Arts and Science College, Thanjavur from 2006 to 2007.

#### Area of Research:

- **❖ Organometallic Chemistry** Catalytic Organic Transformations.
- ❖ Bio- Organometallic Chemistry Metal complex mediated anticancer applications.
- **Green Chemistry**

### **Research Exposure:**

❖ University of Neuchatel, Switzerland.

# Scientific Exposure and other Instruments/Techniques handled:

- ❖ 500 MHz, 400 MHz NMR (Bruker)
- Princeton Applied Potentiometer (Cyclic Voltammetry)
- Cary Varian UV-Vis Spectrophotometer
- ❖ JASCO 460 PLUS FT-IR Spectrometer

#### **Research Publications**

### **International Journals:**

- **1.** Amidation of aldehydes using mono-cationic half-sandwich rhodium(III) complexes with functionalized phenylhydrazone ligands, **Devika**, **N.**; Ananthalakshmi, S; Raja, N.; Gupta, G., Nagesh, N., Therrien, *J. Organomet. Chem.*, **2019**, 886, 65-70.
- **2.** Crystal Structure of Half-sandwich Rh(III) 2-(1-(2-(4-chlorophenyl)hydrazono)ethyl) Pyridyl Chloride Complex, **Devika**, **N.**; Raja, N.; Ananthalakshmi, S.; Therrien, B. **2015**, *E71*, 248–250.
- 3. Crystal Structure of Chlorido (2-{1-[2-(4-chlorophenyl)hydrazin-1-ylidenejN]- (phenyl)methyl}pyridine-N) (η<sup>5</sup>-pentamethylcyclopentadienyl) iridium(III) tetraphenylborate [Ir(C<sub>10</sub>H<sub>15</sub>)Cl(C<sub>18</sub>H<sub>14</sub>ClN<sub>3</sub>)](C<sub>24</sub>H<sub>20</sub>B), **Devika**, N.; Raja, N.; Ananthalakshmi, S.; Therrien, B. 2015, *E71*, m65 -m66.

**4.** Biological Activities of Pyrene-Derived Half-sandwich Organometallic Complexes, Raja, N.; **Devika, N.**, Gupta, G., Nagesh, N., Therrien, B., *J. Organomet. Chem.*, **2015**, 794, 104-114.

#### **Book chapter:**

- ❖ Name of the book: Future Prospects In Chemical Research (FPCR 2022)
- ❖ ISBN number: 978-93-95323-11-6
- ❖ Title of the chapter: Air Stable Palladium Complex Catalyzed One Pot Amidation Reaction -N. Devika.
- ❖ Title of the chapter: New Half-Sandwich Binuclear Ruthenium (II) Complexes Catalyzed One Pot Amidation of Aromatic Aldehydes to Primary Amides - N. Devika.

# Additional / Academic Responsibilities at University:

❖ Co-ordinator for Innovation Voucher Program – ED cell

### **Invited Talk:**

❖ Delivered a lecture on Green Chemistry in National Seminar held at Bon Secours College, Thanjavur.

# Membership of Scientific and Professional Societies:

❖ Life Member in Indian Society for Technical Education.

### **Sponsored Programme organized:**

❖ TEQIP II sponsored two days Lecture workshop on Emerging Trends in Chemistry from Dec. 10-11, 2013 held at BIT Campus, Anna University, Tiruchirappalli.

#### Papers presented in International/National Conferences and Seminars:

- **1.** Presented a Poster entitled "Synthesis, characterization and catalytic vinylation of organic halides of palladium(II) NNO complexes" in National Conference on Recent Developments of Chemistry in Engineering applications held at Department of Chemistry, SRM Valliammai Engineering College, Chennai on 09<sup>th</sup> Feb. 2019.
- 2. Presented a Poster entitled "Half-sandwich iridium(III) complex catalyzed single pot amidation reaction" in International Conference on Chemical Research and Innovations Today" CRIT 2019, P&G and Research Department of Chemistry, Bishop Heber College on 24<sup>th</sup> Jan. 2019.
- **3.** Presented a Poster entitled "Anticancer activity of half-sandwich ruthenium, rhodium and iridium thiosemicarbazone complexes" in National Conference on Recent Advances in Chemistry (RAC-19) held at Department of Chemistry, CEG, Anna University, Chennai on 4<sup>th</sup> and 5<sup>th</sup> Jan. 2019.

- **4.** Presented a paper entitled "Oxidation of Alcohol using ruthenium(5-chloro-2-hydroxy-4-methyl)-phenyl methanone complex" in International Conference on Modern Trends in Chemistry held at PG & Research Department of Chemistry, Vivekananda College, Madurai on 23<sup>rd</sup> Feb.2018.
- **5.** Presented a paper entitled "One pot amide synthesis by using half-sandwich Rh(III) complex" in International Conference on Advancements and Challenges in Chemical Sciences, ICACCS 2018 from 2-3<sup>rd</sup> February 2018 Organized by PG & Research Department of Chemistry, Pachaiyappa's College, Chennai.
- **6.** Presented a paper in International Conference on Recent Advances in Textile and Electrochemical Sciences-2013 Organized by the Department of Industrial Chemistry, School of Chemical Sciences, Alagappa University, Karaikudi during 21<sup>st</sup> & 23<sup>rd</sup> March, 2013.
- **7.** Presented a paper in 3<sup>rd</sup> Asian Conference on Co-ordination Chemistry held at New Delhi, India from 17<sup>th</sup> to 20<sup>th</sup> October, 2011.
- **8.** Presented a paper in National Seminar on Current Trends in Chemistry held at Cochin University of Science and Technology, Kerala, India from 4-5<sup>th</sup> March 2011.
- **9.** Presented a paper in National Conference on Recent Advances in Textile and Electrochemical Sciences organized by Department of Industrial Chemistry, School of Chemistry, Alagappa University, Karaikudi during December 4-5, 2009.
- **10.** Presented a paper in National Seminar on Extensive Dimensions in Chemistry, organized by the Department of Chemistry, Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur held on 28<sup>th</sup> February 2008.

## FDP/Refresher/Orientation/Training courses attended:

- TEQIP-II sponsored two weeks Faculty Development Programme on Multi-disciplinary approaches in chemical sciences held from 18-31<sup>st</sup> July 2016 conducted by Department of Chemistry, BIT Campus, Anna University, Tiruchirappalli.
- **2.** Faculty Development Programme on Learning Improvement Techniques organized and conducted by Teaching Learning Centre, IIT Madras from 28th to 30th January 2016.
- **3.** One week TEQIP-II sponsored Faculty Development Programme on Empowering Educators in English Language Teaching organized by the Department of English from 08.06.15 to 14.06.2015.
- **4.** UGC sponsored Refresher course in Chemistry held at UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli from 28.01.2015 to 17.02.2015.
- **5.** Training Programme on Electrochemical Methods for Evaluation of Nano-materials organized by the Department of Chemistry, NIT, Tiruchirappalli from Nov.20-21, 2014.
- **6.** TEQIP-II sponsored Faculty Development Programme on Recent Trends in Renewable and Non-Renewable Energy Sources conducted by Department of Petrochemical Technology, BIT Campus, Anna University, Tiruchirappalli from 28.08.2013 to 01.09.2013.
- **7.** UGC sponsored 78<sup>th</sup> Orientation Programme held at UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli from 01.02.2013 to 28.02.2013.

## **National Seminars and workshops attended:**

- 1. National Level workshop on Nuclear Magnetic Resonance Spectroscopy held at Gandhigram Rural Institute Deemed to be University, Gandhigram from 8-9, March 2018.
- **2.** Workshop on Asana and Breathing Exercise organized by the Department of Physical Education, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli on 7<sup>th</sup> February 2018.
- **3.** TEQIP II sponsored two day seminar on Challenges and Opportunities in Chemical and Environmental Research organized by Department of Chemistry, BIT Campus, Anna University, Tiruchirappalli during 11-12, August 2016.
- **4.** Two days lecture workshop on Chemistry for Sustainable Green Environment organized by Department of Chemistry, BIT Campus, Anna University, Tiruchirappalli from 11-12, March 2016.
- **5.** UGC Sponsored National Seminar on Recent Trends in X-ray crystallography organized by the PG & Research Department of Chemistry from 8-9, October 2014 held at SRC College, Tiruchirappalli.
- **6.** Three days workshop on Strengthening Academic Leadership Traits and Good Governance for Academic Leaders conducted by Edumatic Solutions held at MGM Beach Resort, Chennai from 22 to 24, October 2013.
- 7. Royal Society of Chemistry sponsored workshop on Photo catalysis for Sustainability: Fundamentals and Applications held at Department of Chemistry, BIT Campus, Anna University, Tiruchirappalli on October 9, 2013.
- **8.** One day National Level Seminar on Strategic Teaching Quality Management for Technical Teachers held at Department of ECE, BIT Campus, Tiruchirappalli on 16<sup>th</sup> March 2013.
- **9.** National Seminar on Recent Developments in Chemistry held on 29<sup>th</sup>, August 2011 at School of Chemistry, Bharathidasan University, Tiruchirappalli.

- **10.** One day seminar on Research Methodology on 27<sup>th</sup>, August 2011, Organized by Centre for Research, Anna University of Technology, Tiruchirappalli.
- **11.** One day awareness programme for Teachers on Heuristic Approach in Teaching, Organized by the Department of Physics, Anna University of Technology, Tiruchirappalli on 29<sup>th</sup>, March 2011.
- **12.** MNRE & CSIR sponsored two days National Conference on Recent Trends in Renewable Energy Sources for Sustainable Development organized by Department of Petrochemical Technology, Anna University of Technology, Tiruchirappalli from 22-23<sup>rd</sup> February, 2011.
- **13.** Two days workshop on Adapting New Methodologies in Teaching, organized by Department of English, Anna University of Technology, Tiruchirappalli from 22-23<sup>rd</sup> September, 2010.
- **14.** One day seminar on Energy and Environment, organized by CEESAT, Department of Chemical Engineering, NIT, Tiruchirappalli on 5<sup>th</sup>, June 2010.
- **15.** State Level Symposium on Theoretical Chemistry, organized jointly by School of Chemistry, Bharathidasan University, Tiruchirappalli and PG and Research Department of Chemistry, Rajah Serfoji Government College, Thanjavur held on 13<sup>th</sup>, December 2006.
- **16.** One day workshop on Textile Chemistry, organized by PG and Research Department of Chemistry, A. Veeriya Vandayar Memorial Sri Pushpam College, Poondi, Thanjavur held on 24<sup>th</sup>, March 2006.

#### **DECLARATION:**

I certify that the information furnished above is correct and true to the best of my knowledge and belief.

Signature of the staff member

**Head of the Department** 

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