Dr. Eswar Pagadala, Ph.D.

Assistant Professor of Chemistry | Founder & Lead, SMCOT Research Group
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PROFESSIONAL SUMMARY

Assistant Professor of Chemistry (since 2022) and founder of the SMCOT Research Group (Sustainable Metal Catalysis for Organic Transformations), with a Ph.D. in organic, organometallic and polymer chemistry (2024). Author of 9 peer-reviewed journal articles, a 2025 book chapter and 2 published Indian patents on transition-metal catalysts for low-temperature benzoxazine curing. Research focuses on ring-opening polymerization, heterocyclic synthesis, and fluorescent chemosensors for metal-ion detection and bioimaging. Experienced in undergraduate and postgraduate teaching, DST-funded project work and conference presentations, and in developing digital chemistry learning resources; recently upskilled in AI tools, HPLC/GC-MS and NPTEL-certified courses.

EDUCATION

Ph.D. in Chemistry (Organic, Organometallic & Polymer Chemistry) 2018 – 2024
Dept. of Chemistry, School of Applied Sciences, Vignan's Foundation for Science, Technology & Research (Deemed to be University), Vadlamudi, Guntur

M.Sc. in Chemistry (Organic Chemistry) 2015 – 2017
Vignan Degree & P.G. College, Acharya Nagarjuna University, Guntur, Andhra Pradesh

B.Sc. (Chemistry major; Physics and Mathematics) 2012 – 2015
Vignan Degree & P.G. College, Palakaluru, Guntur, Andhra Pradesh

Intermediate (M.P.C.) 2010 – 2012
Srichaitanya Junior College, Guntur, Andhra Pradesh

Secondary School Certificate (S.S.C.) 2010
St. Ignatius English Medium High School, Guntur, Andhra Pradesh

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Chemistry Aug 2022 – Present
Vignan Degree & P.G. College, Palakaluru Road, Guntur – 522009, Andhra Pradesh, India

Founder & Lead, SMCOT Research Group 2023 – Present
Sustainable Metal Catalysis for Organic Transformations; research laboratory at VDC Block-102, Vignan Degree & P.G. College, Guntur

Teaching Assistant, Engineering Chemistry During Ph.D. (2018 – 2024)
Vignan's Foundation for Science, Technology & Research (Deemed to be University), Vadlamudi, Guntur

Project Assistant, DST Project 14 Jul 2017 – 22 Jan 2018
"Novel approach to develop value added (Bio-fortification) production of Tomatoes enriched with Iron", under Prof. N. Satya Sree, Dept. of Chemistry, VFSTR, Guntur

RESEARCH INTERESTS

- Controlled ring-opening polymerization of cyclic esters, amides and benzoxazines; transition-metal and nucleophilic organic catalysts for ROP.
- Synthesis of novel heterocyclic compounds and organometallic / coordination complexes.
- Fluorescent chemosensors for selective detection of metal ions and bioimaging applications.
- Smart functional organic and polymeric materials, including bio-derived polymer composites.

HONORS, AWARDS & MEMBERSHIPS

- Best Poster Presentation Award, Recent Advances in Chemical, Pharmaceutical and Biological Sciences (RACPABS-2020), 5–7 March 2020.
- M.Sc. Best Student Award, 2017.

- Best Outgoing Student Award, 2010.
- Life Member, Chemical Research Society of India (Membership ID: LM 2510).

ONLINE CERTIFICATIONS (NPTEL / SWAYAM)

Artificial Intelligence: Concepts and Techniques IISc Bangalore | Jul–Oct 2026 | 12 weeks
Elite certificate (Assignments 25/25, Proctored Exam 36/75); 4 credits recommended; NPTEL–AICTE FDP certificate. Roll No. NPTEL26CS129S988208009

Metal Mediated Synthesis – I IIT Bombay | Jul–Aug 2025 | 4 weeks
(Assignments 15/25, Proctored Exam 30/75); 1 or 2 credits recommended. Roll No. NPTEL25CY60S336000804

Bioinorganic Chemistry IIT Kanpur | Jan–Feb 2023 | 4 weeks
(Assignments 20/25, Proctored Exam 35/75); 1 or 2 credits recommended. Roll No. NPTEL23CY15S44611381

Introductory Organic Chemistry II IISER Pune | Aug–Oct 2022 | 8 weeks
(Assignments 22.54/25, Proctored Exam 37/75); 2 or 3 credits recommended; NPTEL–AICTE FDP certificate. Roll No. NPTEL22CY46S43443464

JOURNAL PUBLICATIONS (9)

1. Naganjaneyulu Gariganti, **Eswar Pagadala**, Shiva Krishna Loke, Anjaneyulu Javisetti, Bhaskar Poola, S. Md Sharif, V. Srinivasadesikan, Naresh Kumar Katari*, Ravi K. Kottalanka*. **Design, Synthesis and Apoptotic Activity of Substituted Chalcones Tethered 1,3,5-Triazine Hybrids: An Insights from Molecular Docking, Molecular Dynamics Simulations, DFT, ADME, and DAPI Analyses.** *J. Mol. Struct. (Impact Factor 3.815).* doi.org/10.1016/j.molstruc.2022.134250
2. Naganjaneyulu Gariganti, Shiva Krishna Loke, **Eswar Pagadala**, Poojitha Chinta, Bhaskar Poola, Prabhakar Chettic, Ravi K. Kottalanka*. **Design, synthesis, anticancer activity of new amide derivatives derived from 1,2,3-triazole-benzofuran hybrids: An insights from molecular docking, molecular dynamics simulation and DFT studies.** *J. Mol. Struct. (Impact Factor 3.815)*
3. **Eswar Pagadala**, S. Devaraju, T. Gangadhar Reddy, Ravi K. Kottalanka. **Metal salts used as an efficient catalyst to reduce the ring opening polymerization temperature of benzoxazines.** *J. Macromol. Sci., Part A: Pure Appl. Chem., 2022 (Impact Factor 2.216).* doi.org/10.1080/10601325.2022.2098144
4. **Eswar Pagadala**, Loke Shiva Krishna, Venkatesan Srinivasadesikan, Ravi K. Kottalanka*. **Unprecedented Structural Evidence for Pyrrole-Imine to Azafulvene-Amine Tautomerization in Iminopyrrolyl Schiff's Base Ligand: Coexistence of both Tautomers in a Single Crystal.** *J. Mol. Struct., 2021, 1244, 131030 (Impact Factor 3.815).* doi.org/10.1016/j.molstruc.2021.131030
5. **Eswar Pagadala**, Shiva Krishna Loke, S. Rex Jeya Rajkumar, Venkatesan Srinivasadesikan, Balajee Ramchandran, Ravi K. Kottalanka*. **Biological Evolution of Titanium (IV) Complex [{(NNO)2Ti}3O3] Bearing Bidentate Heteroditopic Schiff Base Ligand: Synthesis, Structure and Biological Studies.** *Asian J. Chem., 2020, 32(2), 441-450.* doi.org/10.14233/ajchem.2020.22464
6. **Eswar Pagadala**, Shiva Krishna Loke, Ravi K. Kottalanka*. **Crystal Structure of Bromide Salt of Iminopyrrolide Schiff Base [{2-(Ph3CN=CH)C4H3NH}-Br-{2-(Ph3CN(H)CH)C4H3NH}].** *IUCrData*
7. Shiva Krishna Loke, **Eswar Pagadala**, Venkatesan Srinivasadesikan, Rex Jeya Rajkumar Samdavid Thanapaul, T. Pooventhiran, Renjith Thomas, G. Naganjaneyulu, Ravi K. Kottalanka*. **Unprecedented biological evaluation of Zn(II) complexes supported by "Self-adjustable" acyclic diiminodipyrromethane Schiff's bases: DFT, molecular docking; biological activity studies.** *Inorg. Chem. Commun., 2021, 133, 108936.* doi.org/10.1016/j.inoche.2021.108936
8. Shiva K. Loke, **Eswar Pagadala**, S. Devaraju, V. Srinivasadesikan, Ravi K. Kottalanka*. **New zinc complexes derived from "self-adaptable" acyclic diiminodipyrromethanes as potent catalysts for the reduction of curing temperature of bisphenol-A/F benzoxazines.** *RSC Adv., 2020, 10, 36275.* doi.org/10.1039/d0ra07837a
9. Shiva Krishna Loke, **Eswar Pagadala**, R. K. Kottalanka*. **5,5′-(1-Phenylethane-1,1-diyl)bis(1H-pyrrole-2-carboxaldehyde).** *IUCrData, 2019, 4, x191660.* doi.org/10.1107/S2414314619016602

BOOK CHAPTER

1. Titanium-mediated reactions in organic synthesis. *In: Advances in Organic Synthesis, Vol. 18, 2025.*

PATENTS (2 PUBLISHED)

1. Development of a transition metal based organo-metallic complexes used as catalysts for curing of benzoxazines at low temperature. *Published Indian Patent, Application No. 202241015648.*
2. Development of a new transition metal complex catalysts for curing of benzoxazines at low temperature. *Published Indian Patent, Application No. 202141038070.*

RESEARCH PROFILE & METRICS

- **Scopus:** h-index 3, 39 citations | **Google Scholar:** h-index 6, 121 citations
- Scopus Author ID: 57212762237 | ORCID: 0000-0003-2383-6700 | ResearchGate: Eswar-Pagadala
- **SMCOT Research Group website:** sites.google.com/view/smcot-research-group/home

CONFERENCES, WORKSHOPS & FDPS (24)

Papers & Posters Presented (9)

- RADSDSMPOA-2026: Recent Advances in Designing and Sustainable Development of Small Molecules for Pharmaceutical and Optoelectronic Applications — Poster – Dept. of Chemistry, VFSTR, Guntur, 26–27 Jun 2026
- ALAN-2026: The Alchemical Legacy of Acharya Nagarjuna: Exploring Traditional and Contemporary Perspectives — Paper – RUSA-sponsored National Seminar, Acharya Nagarjuna University & CAPS, 7–8 Jan 2026
- RACSSD-2025: Recent Advances in Chemical Sciences for Sustainable Development — Poster – Dept. of Chemistry, Acharya Nagarjuna University, A.P.
- STAAS-2024: Recent Trends in Sustainable Technology and its Applications in Applied Sciences — Poster – Dept. of Chemistry, Acharya Nagarjuna University, A.P.
- 6th International Conference on Nanoscience and Nanotechnology (ICONN 2021) — Poster – SRM University, Chennai
- RACPABS-2020: Recent Advances in Chemical, Pharmaceutical and Biological Sciences — Poster (Best Poster Award) – 5–7 Mar 2020
- 26th CRSI–RSC Joint National Symposium in Chemistry — Poster – VIT Vellore, 6 Feb 2020
- RAMSSD-2019: Recent Advances in Materials Science for Sustainable Development — Poster – National Conference, 2019
- ICCSN-2019: International Conference on Chemical Science and Nanomaterials — Poster – International Conference, 2019

Workshops & Faculty Development Programmes (3)

- Five-Day Hands-on Workshop on HPLC & GC-MS — SRM University-AP, 19–23 Jan 2026
- FDP on “GenAI & ChatGPT Applications” (FDP-2026), 5 days — Vardhaman College of Engineering, Hyderabad; Dr. Vithalrao Vikhe Patil COE, Ahilyanagar; K S School of Engineering & Management, Bangalore, 2–6 Mar 2026
- AI Tools Workshop (AI tools and ChatGPT) — be10x, 15–17 Mar 2026

Conferences, Seminars & Webinars Attended (12)

- Webinar: Hypothesis Formulation and Testing Through Regression Analysis — Jun 2026
- National Webinar: Questionnaire Design & Scale Development — Dept. of Management Studies, VFSTR, 26 Jun 2026
- Webinar: Bridging the Gap – Identifying Research Gap and Formulating Effective Research Objectives — Dept. of Management Studies, VFSTR, 24 Apr 2026
- Biosyntheora Webinar: Organoids – From Discovery to the Future of Intestinal Biology (QUAERESPHERE series) — 29 Mar 2026
- Webinar: Maximize Your Research Impact and Access — Taylor & Francis Group with APSCHE, 18 Feb 2026
- International Webinar: Academic Publishing Trends – What Journal Editors Expect in Your Paper — Skill Activate, 31 Jan 2026
- International Conference on Recent Trends in Organometallics and Material Science — Easwari Engineering College, Chennai, 2023

- Webinars: Recent Trends in Organocatalysis; Recent Advances in Materials Chemistry (RAMC-2021); Emerging Techniques in Polymers — VFSTR, 2021
- Webinar: Computational Chemistry – A Tool in Modern Era — VFSTR, 2020
- Seminar: Need for Quality and Context in Engineering and Science Research — KLEF, 29 Sep 2018

EDUCATIONAL RESOURCES & OUTREACH

- **Rasayanashastra** – interactive chemistry web application for students (spectroscopy module under development).
- **Named Reactions Flashcards** – an 80-card flashcard deck for organic chemistry learners.
- **Organic Chemistry Complete Handbook** – exam-oriented handbook for NEET and AP & TS Intermediate; chapter-wise NEET-UG chemistry notes.
- **SMCOT Research Group website** – research, publications, team, collaborations and news pages (Google Sites).

PERSONAL DETAILS

Date of Birth: 8 May 1995 **Place of Birth:** Guntur, Andhra Pradesh **Nationality:** Indian
Sex: Male **Marital Status:** Single

Place: Guntur *(Dr. Pagadala Eswar)*