
ORUGANTI ANJANEYULU, PhD

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Department of Chemistry,
School of Chemical Sciences
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Research Interests:

- ❖ Design and Development of Nano Materials towards Catalysis
 - ❖ Metal Complexes of Biological relevance/Medicinal importance
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Research & Teaching Experience:

Nov. 2019: Assistant Professor, Department of Chemistry,
Central University of Karnataka, Kalaburagi, Karnataka, India.

Aug. 2017: Assistant Professor (Contractual), Department of Chemistry,
Central University of Karnataka (CUK).

2014-2017: Post-Doctoral researcher, National Institute for Materials Science, (NIMS),
Tsukuba, Japan.

2012-2014: Research Associate (RA), Dept. of Chemistry, IIT Delhi.

Educational Qualifications:

2006-2012: Ph.D Thesis, School of Chemistry, University of Hyderabad.

2002- 2004: M. Sc. (Chem.) With 72% from Karnataka University Dharwad, Karnataka.

1999-2002: B. Sc With 82% from Andhra Loyola College, Vijayawada, A.P.

Contributions at CUK:

- ❖ Designed Experiments, prepared laboratory manual for course titled **CYL 405: Inorganic Chemistry Laboratory** of School of Chemical Sciences.
- ❖ Established Independent Research Laboratory, guiding PhD and Master Students for their dissertation / research projects.

Research Grant:

1. UGC-BSR Research Start-Up-Grant, No.F.30-546/2021 (BSR), Dt: 05.11.2021, “Synthesis, Structural and Spectroscopic Investigations on Bismuth-Lanthanide Heterometallic Complexes”. Principal Investigator (PI), (2021-2024).
 2. Project Title: “Photo memristors using nanomaterials for neuromorphic applications”
Funding Agency: CRS Project Proposal at UGC-DAE Consortium for Scientific Research
CRS project proposal CRS/2024-25/1711, Co-Principal Investigator (Co-PI), (2025-2028).
 3. Synthesis, Characterization of Novel- Isatin molecules, Docking studies their metal complexes in Nano form for Anti-Cancer Activity, Principal Investigator (PI), DST-PAIR, (2025-2030).
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Research Publications :

1. Fabricating Metallic Dielectric Zirconium Nitride Thin Films for Photoelectric Conversion
Satoshi Ishii, **Anjaneyulu Oruganti**, Ilario Bisignano, Hideki Abe
ACS Applied Optical Materials, 2025, 3(2), 313–318
2. Harnessing the therapeutic potential of macromolecular metal (II) complexes derived from quinoline and thiazole core ligands: synthesis, spectral analysis, in vitro and *in silico* biological evaluation.
Nagesh Gunavanthrao Yernale, Basavarajaiah Suliphuldevara Mathada ,
Oruganti Anjaneyulu , N Basamma, N. D Sudharani, P Kaveri, Prashantha Karunakar ,
Prabhurajeshwar Chidre, H M Navya **J. Mol. Struct. 2025, 1338, 142280 (IF = 4.0)**
3. Metal Carbide as a Light-harvesting and Anti-Coking Catalysis Support for Dry Reforming of Methane, Kazu Takeda, Akira Yamaguchi, Yohei Cho, **Oruganti Anjaneyulu**, Takeshi Fujita, Hideki Abe and Masahiro Miyauchi,
Global Challenges, 2020, 4(1), 1900067 (IF = 3.84)
4. Saloplastics as multiresponsive ion exchange reservoirs and catalyst support
Flavien Sciortino, Sajjad Husain Mir, Amir Pakdel, **Anjaneyulu Oruganti**, Hideki Abe, Agnieszka Witecka, Dayangku Noorfazidah, Awang Shri, Gauthier Rydzek and Katsuhiko Ariga **J. Mater. Chem. A, 2020, 8, 17713-17724 (IF = 11.3)**
5. Integrated tuneable synthesis of liquid fuels via Fischer–Tropsch technology
Jie Li, Yingluo He, Li Tan, Peipei Zhang, Xiaobo Peng, **Anjaneyulu Oruganti**, Guohui Yang, Hideki Abe, Ye Wang and Noritatsu Tsubaki
Nature Catalysis, 2018, 1, 787–793 (IF = 40.7)
6. Light-Promoted Conversion of Greenhouse Gas over Plasmonic Metal-Carbide

- Nanocomposite Catalysts, **Oruganti Anjaneyulu***, Kazu Takeda, Satoshi Ishii, Shigenori Ueda, Tadaaki Nagao, Peng Xiaobo, Takeshi Fujita, Masahiro Miyauchi and Hideki Abe *Mater. Chem. Front.*, 2018, 2, 580-584 (IF = 7.79)
7. Mesoporous Bimetallic RhCu Alloy Nanospheres Using a Sophisticated Soft-Templating Strategy, Bo Jiang, Kenya Kani, Muhammad Iqbal, Hideki Abe, Tatsuo Kimura, Md. Shahriar A. Hossain, **Anjaneyulu Oruganti**, Joel Henzie and Yusuke Yamauchi *Chem. Mater.*, 2018, 30 (2), 428–435 (IF = 9.46)
 8. Nanostructured polymeric Yolk–Shell capsules: a versatile tool for hierarchical nano catalyst design, N. M. Sanchez-Ballester, G. Rydzek, A. Pakdel, **Anjaneyulu Oruganti**, K. Hasegawa, M. Mitome, D. Golberg, J. P. Hill, H. Abe and Katsuhiko Ariga *J. Mater. Chem. A*, 2016, 4, 9850-9857 (IF = 11. 3)
 9. Plasmon-mediated Photothermal Conversion by TiN Nanocubes toward CO Oxidation under Solar Light Illumination **Oruganti Anjaneyulu**, Satoshi Ishii, Tsubasa Imai,, Toyokazu Tanabe, Shigenori Ueda, Tadaaki Nagao and Hideki Abe *RSC Adv.*, 2016, 6, 110566-110570 (IF = 3.10)
 10. Oxide-based nanostructures for photocatalytic and electrocatalytic applications Aparna Ganguly, **Oruganti Anjaneyulu**, Kasinath Ojha and Ashok K Ganguli *Cryst. Eng. Comm.*, 2015, 17, 8978-9001. (IF = 3.47)
 11. Effect of reduced graphene oxide-TiO₂ nanotube composites and surface plasmon resonances of Ag@TiO₂ nanocubes on dye sensitized solar cell performance P. S. Chandrasekhar, Nikhil Chander, **Oruganti Anjaneyulu** and Vamsi K. Komarala *Thin Solid Films* 2015, 594, 45-55. (IF = 1.86)
 12. Synthesis of Cr and La-codoped SrTiO₃ nanoparticles for enhanced photocatalytic Performance under sunlight irradiation. Surendar Tonda, Santosh Kumar, **Oruganti Anjaneyulu** and Vishnu Shanker *Phys. Chem. Chem. Phys.*, 2014, 16, 23819-23828. (IF = 4.12)
 13. Graphene based hybrid materials: Synthetic approaches and properties Kasinath Ojha, **Oruganti Anjaneyulu** and Ashok K Ganguli *Curr. Sci.*, 2014, 107, 397-418. (IF = 0.84)
 14. Designing of Nanoarchitectures for Photo and Electrocatalytic Applications Aparna Ganguly, **Oruganti Anjaneyulu**, Debashree Das and Ashok K. Ganguli *SMC Bulletin* 2013, 4(3), 1-10
 15. Structural motifs in phenylbismuth heterocyclic carboxylates – secondary interactions leading to oligomers, **O. Anjaneyulu**, D. Maddileti and K. C. Kumara Swamy *Dalton Trans.*, 2012, 41, 1004-1012 (IF = 4.02)
 16. Studies on bismuth carboxylates- Synthesis and characterization of a new structural form of bismuth (III) dipicolinate, **O. Anjaneyulu** and K.C. Kumara Swamy

J. Chem. Sci., 2011, 123, 131-137 (IF = 1.29)

17. Coordinatively polymeric and monomeric bismuth (III) complexes with pyridine carboxylic acids, **O. Anjaneyulu**, T. K. Prasad and K. C. Kumara Swamy
Dalton Trans., 2010, 39, 1935–1940. (IF = 4.02)

18. Tris(4-oxy-pyridinium)nitrato lanthanide complexes $[M(4-O-C_6H_4NH)_3(NO_3)_2(H_2O)_2][NO_3]$ {M = La, Ce, Pr, Nd, Eu, Gd} – Synthesis, properties and structural characterization, **O. Anjaneyulu**, T. K. Prasad and K. C. Kumara Swamy
Inorg. Chim. Acta, 2010, 363, 2990–2995. (IF = 2.04)
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Conference/ Symposia/ FIP/ Refresher course/ Short Term Courses---Attended

- Four-Week Faculty Induction Programme-3(FIP-3) from Jawaharlal Nehru Technological University (JNTU), Hyderabad, 02-11-2020 to 08-12-2020 with A⁺ grade.
 - Two-week Refresher Course (RC) on “Novel Therapeutic Approaches in Drug Discovery & Development against Pandemic diseases” from Jawaharlal Nehru Technological University (JNTU), Hyderabad, 01-03-2021 to 16-03-2021 with A⁺ grade.
 - Short term training programme on Synthesis, Characterization and its Application of Nanomaterials, 24th -29th August 2020, Organised by Centre for Nanoscience and Technology, Jawaharlal Nehru Technological University, Hyderabad.
 - One week pedagogical training on Tools for online teaching, learning and evaluation, 1st - 6th July 2020, Organised by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra.
 - Attended 33rd CRSI National Symposium in Chemistry and CRSI-ACS Lectures, July 4th - 6th, 2024 at Dr. Reddy's Laboratories Hyderabad.
 - 5- Day International Conference on Advances in Chemistry for Energy and Environment, CACEE-2024, Monday 16th – Friday 20th December 2024, TIFR, Mumbai.
 - 2-Day International Conference on CENTURY OF CHEMISTRY IN INDIA – Celebration of Achievement of Indian Chemical Industries. 28th – 29th January 2025, Nehru Centre, Mumbai.
 - Two-week Refresher Course (RC) in Chemical Sciences from UGC-MMTTC, Goa University, Goa. From 30-01-2025 to 12-02-2025 with A grade.
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Awards & Honors :

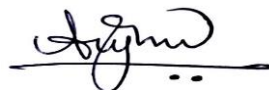
- Awarded Junior Research Fellowship (CSIR-JRF, 2006-2008) and Senior Research fellowship (CSIR-SRF, 2008-2011)
- Best poster award in ICIACS conference 2013.

Membership :

- Life time Member, Chemical Research Society of India (CRSI)
- Life time Member, Society for Materials Chemistry.

Additional Responsibilities held at Central University of Karnataka (CUK)

- Coordinator, B. Sc (PCM)
 - Sports Coordinator
 - IQAC Coordinator- Dept. of Chemistry
 - Criteria- V Coordinator, IQAC, CUK
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Dr. Oruganti Anjaneyulu