

RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING & TECHNOLOGY,  
NANDYAL (AUTONOMOUS)

Department of chemistry

*LIST OF ARTICLES IN WEB OF SCIENCE JOURNALS*

2018-19

1. Bakthavatchala Reddy Nemallapudi, Grigory V. Zyryanov, **Balakrishna Avula**, Mallikarjuna Reddy Guda and | Sravya Gundala. An effective green and ecofriendly catalyst for synthesis of bis(indolyl)methanes as promising antimicrobial agents. J Heterocyclic Chem. 2019;1-9. <https://doi.org/10.1002/jhet.3729>
2. G. Sravya, G. Suresh, Grigory v. Zyryanov, **A. Balakrishna**, and N. Bakthavatchala Reddy. K<sub>2</sub>CO<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub>: An Efficient and Recyclable Catalyst for One-Pot, Three Components Synthesis of  $\alpha$ -Aminophosphonates and Bioactivity Evaluation, Asian Journal of Chemistry, Vol. 31, No. 10 (2019), 2383-2388
3. B. Reddy Nemallapudi, G.V. Zyryanov, **Balakrishna Avula**, M. Reddy Guda, S. Reddy Cirandur, C. Venkataramaiah, W. Rajendra, S. Gundala, Meglumine as a green, efficient and reusable catalyst for synthesis and molecular docking studies of bis(indolyl)methanes as antioxidant agents, Bioorganic Chemistry (2019),  
doi: <https://doi.org/10.1016/j.bioorg.2019.03.005>
4. Mohan Challam Challa, **Balakrishna Avula**, Sravya Gundala, Mallikarjuna Reddy Guda, Grigory V. Zyryanov, Suresh Reddy Cirandur, Bakthavatchala Reddy Nemallapudi. A Simple and Convenient Strategy for the Synthesis of Novel Ten, Twelve, and Fourteen- membered Phosphorus Macrocyclic Compounds. Journal of Heterocyclic Chemistry. 56, 3, pg no: 818-823 First published: 16 January 2019. <https://doi.org/10.1002/jhet.3456>
5. N. B. Reddy, Grigory V. Zyryanov, G. M. Reddy, **Avula Balakrishna**, A. Padmaja, V. Padmavathi, Cirandur Suresh Reddy, J. R. Garcia, G. Sravya. Design and Synthesis of Some New Benzimidazole Containing Pyrazoles and Pyrazolyl Thiazoles as Potential Antimicrobial Agents, Journal of Heterocyclic Chemistry. Vol8, Issue: 2 589-596, First published: 04 December 2018. <https://doi.org/10.1002/jhet.3435> 4 of 8
6. Paal-knorr synthesis of pyrroles: From conventional to green synthesis **Balakrishna, Avula**, Aguiar, António, Sobral, Pedro, Wani, Mohmmad, Silva, Joana, and Abilio JFN Sobral. CATALYSIS REVIEWS, 2018, VOL. 60, Issue NO.4, 1-28 <https://doi.org/10.1080/01614940.2018.1529932>
7. Simulation results-source for the identification of biological active compounds: Synthesis, antimicrobial evaluation and SARs of three in one heterocyclic motifs, N.B. Reddy, G.V. Zyryanov, G.M. Reddy, **A. Balakrishna**, J.R. Garcia, A. Camilo. Jr, G. Sravya, Medicinal Chemistry Research, (2018) 27:1956-1970. <https://doi.org/10.1007/s00044-018-2206-9>
8. Nano-TiO<sub>2</sub>/SiO<sub>2</sub> catalyzed synthesis, theoretical calculations and bioactivity studies of new  $\alpha$ -aminophosphonates, G. Sravya, V.Z. Grigory **A. Balakrishna**, K.M.K. Reddy, C.S. Reddy, G.M. Reddy, A. Camilo Jr, J.R. Garcia, N. Bakthavatchala Reddy, Phosphorus, Sulfur, and Silicon and the Related Elements, Pages 562-567, Volume 193, Issue 9 Published online: 19 Apr 2018 DOI: 10.1080/10426507.2018.1455201
9. Birusanti, Arun Babu, **Umamahesh Mallavarapu**, Devanna Nayakanti, Chandra Sekhar Espent "Sustainable green synthesis of silver nanoparticles by using Rangoon creeper

leaves extract and their spectral analysis and anti-bacterial studies." *IET Nanobiotechnology* (2018).

10. Rao, Amara Venkateswara, Basa Ashok, **Mallavarapu Umamahesh**, Vatti Chandrasekhar, Gopireddy Venkata Subbareddy, and Anumakonda Varada Rajulu. "Preparation and properties of silver nanocomposite fabrics with in situ-generated silver nano particles using red sanders powder extract as reducing agent." *International Journal of Polymer Analysis and Characterization* 23, no. 6 (2018): 493-501.
11. Venkateswara Rao, Amara, Basa Ashok, **Mallavarapu Uma Mahesh**, Gopireddy Venkata Subbareddy, Vatti Chandra Sekhar, Gollapudi Venkata Ramanamurthy, and Anumakonda Varada Rajulu. "Antibacterial cotton fabrics with in situ generated silver and copper bimetallic nanoparticles using red sanders powder extract as reducing agent." *International Journal of Polymer Analysis and Characterization* 24, no. 4 (2019): 346-354.
12. Amara, Venkateswara Rao, Ashok Basa, **Uma Mahesh Mallavarapu**, Chandrasekhar Vatti, Subbareddy V. Gopireddy, and Varadarajulu Anumakonda. "Preparation and properties of cotton nanocomposite fabrics with in situ generated copper nanoparticles using Red sanders powder extract as a reducing agent." *Inorganic and Nano-Metal Chemistry* (2019): 1-6.