

Faculty Profile



Name: Dr. KESAVARAO SYKAM

Designation: Assistant Professor

Teaching Areas: Organic Chemistry, Inorganic Chemistry, Analytical Chemistry, Polymer Chemistry, Environmental Sciences

Research Interests: Polymers and Functional Materials, Azide-alkyne Click Chemistry, Flame retardants, Biopolymers, Polyurethanes (Foams and Coatings)

Education:

- Ph.D., CSIR-Indian Institute of Chemical Technology, Hyderabad, 2018
- M.Sc., Krishna University, Machilipatnam, Andhra Pradesh, 2010

Research / Selected Publications:

1. Kesavarao Sykam, Sajan Sivanandan, and Pratyay Basak. "1, 2, 3-Triazole mediated, non-halogenated phosphorus containing protective coatings from castor oil: Flame retardant and anti-corrosion applications." *Progress in Organic Coatings* 178 (2023): 107475.
2. Kesavarao Sykam, Shaik Syed Hussain, Sajan Sivanandan, Ramanuj Narayan, and Pratyay Basak. "Non-halogenated UV-curable flame retardants for wood coating applications." *Progress in Organic Coatings* 179 (2023): 107549.
3. Kesavarao Sykam, Shailaja Donempudi, and Pratyay Basak. "1, 2, 3-Triazole rich polymers for flame retardant application: A review." *Journal of Applied Polymer Science* 139, no. 32 (2022): e52771.
4. Kesavarao Sykam, Michael Försth, Gabriel Sas, Agoston Restas, and Oisik Das. "Phytic acid: A bio-based flame retardant for cotton and wool fabrics." *Industrial Crops and Products* 164 (2021): 113349.
5. Kesavarao Sykam, Pothireddy Harika, and Shailaja Donempudi. "Flame-retardant, phosphorous-based polyurethane triazoles via solvent-free and catalyst-free azide-alkyne cycloaddition and their cure kinetics." *Polymers for Advanced Technologies* 32, no. 4 (2021): 1636-1653.
6. Kesavarao Sykam, Kiran Kumar Reddy Meka, and Shailaja Donempudi. "Intumescent phosphorus and triazole-based flame-retardant polyurethane foams from castor oil." *ACS omega* 4, no. 1 (2019): 1086-1094.
7. Kesavarao Sykam, and Shailaja Donempudi. "Novel multifunctional hybrid diallyl ether monomer via azide alkyne click reaction as crosslinking agent in protective coatings." *Polymer* 62 (2015): 60-69.