

HRVATSKO KEMIJSKO DRUŠTVO - SPLIT

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Hrvatsko kemijsko društvo - Split organizira svoj 214. kolokvij koji će se održati **28. kolovoza 2019.** godine (srijeda) s početkom u **12.15 sati u predavaonici E - 402**, Kemijsko-tehnološkog fakulteta u Splitu, Ruđera Boškovića 35.

Predavanje pod naslovom:

"Crystal engineering and porosity studies of organic supramolecular assemblies and mixed-ligand metal-organic frameworks "

održat će **dr. sc. Clive L. Oliver, Senior Lecturer**, Centre for Supramolecular Chemistry Research, Department of Chemistry, University of Cape Town, South Africa. Kolokvijem će predsjedavati doc. dr. sc. Boris-Marko Kukovec, Kemijsko-tehnološki fakultet Split.

Sažetak predavanja

Our research is based broadly on the crystal engineering of supramolecular systems that display porosity, exhibit interesting host-guest inclusion phenomena based on hosts as well as occurrences of polymorphism. The first part of the lecture will deal with organic host molecules that form enclosed, supramolecular assemblies, inspired by nature's ability to produce multi-component, enclosed, supramolecular assemblies such as viruses and cellular membranes.¹ This level of complexity has not been achieved by small-molecule chemists as multi-component ($n > 3$) supramolecular assemblies which enclose chemical space are still relatively rare phenomena.^{2,3} The second part of the lecture will deal with metal-organic framework systems (MOFs), which has seen an explosion in research over the past two decades. We are investigating mostly mixed-ligand MOFs, i.e. where two different types of ligands are part of the framework, elucidating their structures, subsequently studying their desolvation/resolvation behaviours and abilities to trap small molecules from liquids or gases.^{4,5}

References

- [1] Ariga, K., Hill, J. P., Lee, M. V., Vinu, A., Charvet, R., Acharya, S., *Science and Technology of Advanced Materials*, 2008, 9, 014109.
- [2] MacGillivray, L. R., Atwood, J. L., *Nature*, 1997, 389, 469-472.
- [3] Oliver, C. L., Báthori, N. B., Jackson, G. E., Kuter, D., Cruickshank, D. L., 2016, *CrystEngComm*, 18, 3015-3018.
- [4] Chatterjee, N., Oliver, C.L., *CrystEngComm*, 2018, 18(12), 7570-7578.
- [5] Gcwensa, N., Chatterjee, N., Oliver, C.L., *Inorganic Chemistry*, 2019, 58(3), 2880-2088.

Molimo o navedenom predavanju obavijestite sve zainteresirane kolege u Vašoj sredini.

Predsjednik HKD-Split:
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