

## DR. AANCHAL SETHI

### Research Publications :

- Single crystal synthesis and physical property of  $\text{Ba}_8\text{Cu}_{1.0}\text{Ni}_{2.5}\text{Ga}_{10}\text{Si}_{33.5}$  clathrate, Pooja Rawat, **Aanchal Sethi**, Jin Hee Kim, Jong Soo Rhyee, *Heliyon*, 2024, 10, e27134, ISSN : 2405-8440.
- Cuprous delafossites,  $\text{Cu}_3(\text{MFeSb})\text{O}_6$  (M = Na, Li) with honeycomb arrays, realized by topochemical ion-exchange reactions, **Aanchal Sethi**, Dileep Kumar Yadav, Sitharaman Uma, *Ceram. Int.*, 2022, 48, 13833, ISSN : 0272-8842.
- Boosting defects through divalent ion substitution to tailor the optical, textural, catalytic, and photocatalytic properties of  $\text{Th}^{4+}$ -stabilized  $\delta\text{-Bi}_2\text{O}_3$ , **Aanchal Sethi**, Sitharaman Uma, Rajamani Nagarajan, *Mater. Sci. Semicond. Process*, 2022, 141, 106441, ISSN : 1873-4081.
- Investigation of the structure, optical and magnetic properties of the honeycomb layered  $\text{Na}_3(\text{Mn}^{\text{II}}\text{M})\text{SbO}_6$  (M (II) = Fe, Co, Ni, Zn, Mg) and  $\text{Na}_3(\text{Fe}^{\text{II}}\text{M}')\text{SbO}_6$  (M' (II) = Co, Ni, Zn, Mg) oxides, Dileep Kumar Yadav, **Aanchal Sethi**, Sitharaman Uma, *Mater. Today Commun.*, 2022, 30, 103012, ISSN : 2352-4928.
- Oxygen ion conductivity studies of bismuth and bismuth-calcium co-doped  $\text{ThO}_2$ . **Aanchal Sethi**, Sitharaman Uma, Rajamani Nagarajan, *Ceram. Int.*, 2021, 47, 21498, ISSN : 0272-8842.
- Luminescence properties of  $\text{Eu}^{3+}$  and  $\text{Tb}^{3+}$  doped  $\delta\text{-Bi}_2\text{O}_3$  stabilized by  $\text{Th}^{4+}$  substitution. **Aanchal Sethi**, Jyoti Pandey, Sitharaman Uma, Rajamani Nagarajan, *J. Am. Ceram. Soc.*, 2020, 103, 1027, ISSN : 1551-2916.
- Synthesis and characterization of sodium-iron antimonate  $\text{Na}_2\text{FeSbO}_5$ : One-dimensional antiferromagnetic chain compound with a spin-glass ground state. Sitharaman Uma, Tatyana Vasilchikova, Alexey Sobolev, Grigory Raganyan, **Aanchal Sethi**, Hyun-Joo Koo, Myung-Hwan Whangbo, Igor Presniakov, Iana Glazkova, Alexander Vasiliev, Sergey Streltsov, Elena Zvereva, *Inorg. Chem.*, 2019, 58, 11333, ISSN : 0020-1669.
- New series of honeycomb ordered oxides,  $\text{Na}_3\text{M}_2\text{SbO}_6$  (M(II) = Mn, Fe, (Mn, Fe), (Mn, Co)): synthesis, structure and magnetic properties. Dileep Kumar Yadav, **Aanchal Sethi**, Shalu Atri, Sitharaman Uma, *Dalton Trans.*, 2019, 48, 8955, ISSN : 1477-9234.
- Catalytic application of oxygen vacancies induced by  $\text{Bi}^{3+}$  incorporation in fluorite structured  $\text{ThO}_2$ . Jyoti Pandey, **Aanchal Sethi**, Sitharaman Uma, Rajamani Nagarajan, *ACS Omega* 2018, 3, 7171, ISSN : 2470-1343.