

## **Internal Seminar**

### **Photoluminescent amidinate based main-group and transition metal compounds**

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Four-coordinate organo boron compounds having a N<sup>N</sup> chelating ligands attracted enormous interest due to their applications in a wide range of areas like bioimaging, sensors, OLEDs and dyes. Meantime, reports on synthesis and reactivity studies of anionic amidinate [(Ar)C(NR'<sub>2</sub>)]-ligated compounds are scarce. In particular, the applicability of those compounds in synthesising light emitting materials, exploring their photo-physical properties remains unexplored. In view of that interest, we designed a novel series of amidinate ligated main-group organo boron compounds. In addition, we have explored novel amidinate appended photoluminescent organo indium and coinage metal (Cu, Ag and Au) compounds. Herein, we have attempted to explore their photophysical properties by extending π-conjugation on the amidinate carbon atom. These series of amidinate ligated indium, boron and coinage metal compounds have been successfully synthesised using standard glove box and Schlenk line technique and well characterised using multi-nuclear NMR spectroscopy, SC-XRD analysis, elemental analysis and Mass spectrometry.

***Thursday, Nov 9<sup>th</sup> 2023***

***11:30 AM***

***Auditorium***