

MMEC SEMINAR SERIES

MECHANICS: MODELLING, EXPERIMENTATION, COMPUTATION

Tuesdays @ 4:00pm – Room 3-370

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Metal-coordination: using more of nature's tricks to assemble new soft materials

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Growing evidence supports a critical role of metal-coordination in soft biological material properties such as self-healing, underwater adhesion and autonomous wound plugging.

Using bio-inspired metal-coordinating polymers, initial efforts to mimic these properties have shown promise. In addition, with polymer network mechanics dictated by coordinate crosslink dynamics, material properties can be easily tuned from visco-elastic fluids to elastic solids.

Given their exploitation in desirable material applications in nature, metal-coordinate crosslinking provides an opportunity to advance synthetic polymer materials design. Early lessons from this pursuit are presented.

Seminar Host: Ken Kamrin (kkamrin@mit.edu)

Please join us for refreshments beforehand, outside Room 3-370

For more information, visit our website at <http://web.mit.edu/mmec/>

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