

FACT SHEET 2021

QUICK FACTS

» Graduate Programs

Materials Science
Materials Science & Engineering
Polymer Science

» Degrees Offered

M.S., MEng., Ph.D.

» Students

>150 Graduate students
perform research in IMS

» Research Funding FY2018 -2019

\$18M New Awards
\$16.7M Federal
\$1.3M Non-Federal

» Publications

228 Journal Publications in 2020/21

» Industrial Affiliates Program

38 Member Companies
>50 Industrial Sponsors

» Faculty

43 (plus 4 emeriti) Housed in IMS
130 Affiliated UConn Faculty

» Staff

9 Administrative/Support Staff
11 Scientific/Technical Staff

» Alumni

>997 Total
>351 Live in Connecticut

» Institute Director

Dr. Steven L. Suib

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Storrs, CT 06269-3136
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Research Instrumentation

The Institute houses a wide range of advanced research instruments and facilities. These include:

- atomic force microscopy
- computational modeling
- electron microscopy (SEM & TEM)
- gas chromatography
- high field characterization
- IR, Raman and UV spectroscopy
- laser spectroscopy
- nanobionics device fabrication facility, clean room
- NMR spectrometry
- optical microscopy
- polymer rheology
- surface analysis (AES & XPS)
- thermal analysis
- X-ray diffraction & spectroscopy (EDS, WDS, XRD, SAXS)

Industrial Collaboration

The Institute supports the economic development of the state and the surrounding region by collaborating with local industry in three modes:

- Small fee-for-service projects where industry needs scientific/technical support beyond that available in commercial service laboratories.
- The Industrial Affiliates Program (Director: Dr. Paul Nahass, Associate Director: Dr. Hatice Bodugoz Senturk) – a subscription-based program of ≈40 companies having an ongoing working relationship with IMS.
- Large collaborative projects, often involving major federal support.

Graduate Programs

IMS is a key resource for graduate research students from across engineering and the sciences. The programs for three graduate fields of study are based within the Institute.

1. Materials Science

This is a flexible interdisciplinary program with input from the Departments of: Chemical and Biomolecular Engineering, Chemistry, Electrical and Computer Engineering, Materials Science and Engineering, Mechanical Engineering, Molecular and Cell Biology, and Physics. (Program Lead: Dr. Steven L. Suib)

2. Materials Science and Engineering

This program is offered through the Department of Materials Science and Engineering in the School of Engineering and concerns the production, processing, characterization, selection, design and modeling of materials. (Program Lead: Dr. Bryan Huey)

3. Polymer Science

This interdisciplinary graduate program has faculty from the Departments of: Chemical and Biomolecular Engineering, Chemistry, Molecular and Cell Biology, and Physics. Areas of particular interest include: polymer synthesis and properties, composites, biomaterials, devices, and computation. (Program Lead: Dr. Luyi Sun)

FACT SHEET 2021

IMS Associated Faculty

Biomedical Engineering

Dr. Yupeng Chen
Dr. Ki Chon
Dr. Alix Deymier
Dr. Bin Feng
Dr. Martin Han
Dr. Kazunori Hoshino
Dr. Cato T. Laurencin
Dr. Tannin Schmidt
Dr. Sina Shahbazmohamadi
Dr. Wendy Vanden Berg-Foels
Dr. Yi Zhang
Dr. Guoan Zheng

Chemical & Biomolecular Engineering

Dr. George M. Bollas
Dr. Kelly A. Burke
Dr. Cato T. Laurencin
Dr. Yu Lei
Dr. W. K. Anson Ma
Dr. Jeffrey R. McCutcheon
Dr. Mu-Ping Nieh
Dr. Yang Qin
Dr. Leslie Shor
Dr. Luyi M. Sun
Dr. Julia A. Valla

Chemistry

Dr. Douglas H. Adamson
Dr. Alfredo Angeles-Boza
Dr. Alexandru D. Asandei
Dr. William F. Bailey
Dr. José Gascón
Dr. Jie He
Dr. J. Nathan Hohman
Dr. Rajeswari Kasi
Dr. Challa V. Kumar
Dr. Yao Lin
Dr. Tomoyasu Mani
Dr. Fotios Papadimitrakopoulos
Dr. Eugene Pinkhassik
Dr. Rebecca Quardokus
Dr. Jessica Rouge
Dr. James F. Rusling
Dr. Thomas A. P. Seery
Dr. Gregory Sotzing
Dr. Steven L. Suib
Dr. Jing Zhao

Civil & Environmental Engineering

Dr. Maria Chrysochoou
Dr. Shinae Jang
Dr. Jeong-Ho Kim
Dr. Baikun Li
Dr. Ramesh Malla
Dr. Kay Wille
Dr. Arash E. Zaghi
Dr. Wei Zhang

Electrical & Computer Engineering

Dr. Rajeev Bansal
Dr. Necmi Biyikli
Dr. Yang Cao
Dr. Ali Gokirmak
Dr. Faquir C. Jain
Dr. Helena Silva

Marine Sciences

Dr. Heidi M. Dierssen
Dr. J. Evan Ward

Materials Science & Engineering

Dr. Mark Aindow
Dr. S. Pamir Alpay
Dr. Harold D. Brody
Dr. Avinash M. Dongare
Dr. Lesley Frame
Dr. Pu-Xian Gao
Dr. Rainer J. Hebert
Dr. Bryan D. Huey
Dr. Jasna Jankovic
Dr. Theodoulos Z. Kattamis
Dr. Cato T. Laurencin
Dr. Seok-Woo Lee
Dr. Radenka Maric
Dr. Serge M. Nakhmanson
Dr. Volkan Ortalan
Dr. George A. Rossetti Jr.
Dr. Xueju "Sophie" Wang
Dr. Yuanyuan Zhu

Mechanical Engineering

Dr. Baki Cetegen
Dr. Wilson K. S. Chiu
Dr. Farhar Imani
Dr. Kazem Kazerounian
Dr. Ying Li
Dr. George Lykotrafitis
Dr. Thanh D. Nguyen
Dr. Julian A. Norato
Dr. Ugur Pasaogullari
Dr. David M. Pierce
Dr. Anna Tarakanova
Dr. Savas Tasoglu
Dr. Dianyun Zhang

Molecular & Cell Biology

Dr. James L. Cole
Dr. Charles Giardina
Dr. Kenneth M. Noll
Dr. Victoria L. Robinson
Dr. Carolyn M. Teschke

Nutritional Sciences

Dr. Yangchao Luo

Pathobiology

Dr. Mazhar I. Khan

Pharmaceutical Sciences

Dr. Robin H. Bogner
Dr. Diane J. Burgess
Dr. Bodhisattwa Chaudhuri
Dr. Debra A. Kendall
Dr. Na Li
Dr. Xiuling Lu

Physics

Dr. Alexander Balatsky
Dr. Elena E. Dormidontova
Dr. Niloy Dutta
Dr. Gayanath W. Fernando
Dr. George Nicholas Gibson
Dr. Phillip L. Gould
Dr. Jason Hancock
Dr. Menka Jain
Dr. Richard T. Jones
Dr. Jeffrey S. Schweitzer
Dr. Boris Sinkovic
Dr. Ilya Sochnikov
Dr. Barrett O. Wells

Physiology and Neurobiology

Dr. Linnaea Ostroff

Plant Science & Landscape Architecture

Dr. Cristian P. Schulthess

UConn Health

Dr. Douglas J. Adams
Dr. A. Jon Goldberg
Dr. J. Robert Kelly
Dr. Yusuf Khan
Dr. Insoo Kim
Dr. Liisa Tiina Kuhn
Dr. Sangamesh Kumbar
Dr. Cato T. Laurencin
Dr. Wai Hong (Kevin) Lo
Dr. Lakshmi S. Nair
Dr. Syam Nukavarapu

Emeritus/Retired Faculty

Dr. Thomas Anderson
Dr. Robert R. Birge
Dr. Joseph I. Budnick
Dr. C. Barry Carter
Dr. Anthony DiBenedetto
Dr. Harry Frank
Dr. Norman Garrick
Dr. Maurice Gell
Dr. Douglas S. Hamilton
Dr. William Hines
Dr. Eric H. Jordan
Dr. Devendra Kalonia
Dr. Lawrence A. Kappers
Dr. Quentin Kessel
Dr. James Knox
Dr. Matthew Mashikian
Dr. Richard S. Parnas
Dr. Douglas Pease
Dr. Donald Potter
Dr. Wolf-Dieter Reiter
Dr. Daniel A. Scola
Dr. Montgomery T. Shaw
Dr. Winthrop W. Smith
Dr. William C. Stwalley
Dr. Chong Sook P. Sung
Dr. Geoff Taylor

IMS resident faculty are indicated in bold