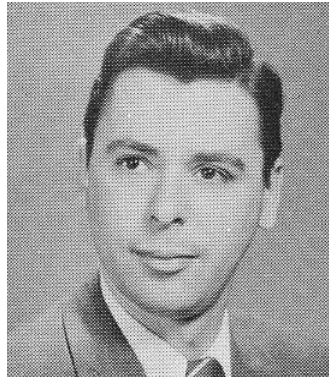


The 1st Generation: Where it all Began

1st Generation: The Plastics Engineering Department at UMass Lowell was founded by Dr. Russell Ehlers in 1954. Professor Ehlers established laboratories and courses in the area of plastics processing and soon hired two other faculty members to establish and teach courses in the areas of plastics materials and plastics design. Professor Raymond Normandin, a chemist by training, developed and delivered the materials curriculum for the program. Professor Henry Thomas developed and delivered courses related to the mechanical behavior and performance of plastics materials. Together these three “1st Generation” plastics educators put together a Plastics Engineering curriculum that is still the core of the program today. Each of these faculty members are deceased but their memories live on. Each year, Plastics Engineering students receive scholarships from endowed scholarship funds that have been established in their names. If you wish to contribute to these scholarship funds, you may do so by completing the form in the January 2009 *Plasticator* newsletter enclosed in this literature packet.



Professor Russell Ehlers



Professor Raymond Normandin



Professor Henry Thomas

The 2nd Generation: Help Us Continue the Legacy

2nd Generation: It is our belief that the very best way to thank each of the five 2nd Generation Plastics Educators being honored at the Alumni and Friends Dinner on Tuesday June 23, 2009 is to provide support for new or newly renovated laboratories at UMass Lowell in each of their names. Each of these faculty members have unique expertise that they have passed on to so many former students. Your support of these laboratories will allow current and future generation Plastics Engineering students to gain the hands on engineering skills required by industry. *Funds donated for this effort will go to the Plastics Engineering Department and not the University.* The department facilities committee will determine how the funds are best used, and leveraged when possible, to have the greatest impact in improving the laboratories. While financial support for these lab construction projects is greatly appreciated, support in terms of lab equipment is also appreciated if the equipment needs of the laboratory can be matched with those of the donor.

Professor Aldo Crugnola Medical Plastics Laboratory:

Aldo Crugnola has been a pioneer in the use of plastics for medical applications. Many plastics engineering graduates gravitate towards careers in the medical plastics or device industries, and lab experiences working with medical plastics would prove valuable. In this lab, students would gain experience with clean room gowning procedures, particle monitoring, bulk foil packaging, in vitro degradation studies for bioabsorbable plastics, documentation concepts and other practices common in the medical device industry.



Professor Rudolph Deanin Blending and Compounding Lab:

Rudy Deanin has served as graduate research advisor for hundreds of graduate students at Lowell on topics that are quite diverse. However, the most common thread that connects many of these research projects is blending and compounding. Rudy and his students have looked at the properties and morphology of countless blends produced by all types of compounding techniques. This laboratory would be used for the “preparation” of virgin and recycled polymer blends as well as formulations containing additives, using bulk melt processing techniques such as single and twin screw extrusion.



Professor Stephen Driscoll Rheology Laboratory:

Stephen Driscoll’s experience in plastics materials and additives is unprecedented. He has also been a pioneer in the study of melt flow behavior and bulk rheological properties. This will be a dedicated test laboratory where students could gain experience with rheological testing using melt flow rate testers (as much as Prof. Driscoll questions the value of this industry standard test), capillary rheometers, parallel plate rheometers and cone and plate rheometers.



Professor Stephen Orroth Extrusion Laboratory:

Steve Orroth has always been an advocate for hands on laboratory experiences for students. A single screw profile extrusion laboratory where students can gain hands on experience and evaluate extrusion process parameters, extrusion screw design, extrusion instrumentation, die design and downstream equipment would greatly enhance the student’s plastics processing experience.



Professor Nicholas Schott Process Control Laboratory

Nick Schott has been the instructor for the “Process Control” course taken by Plastics Engineering students for most of his tenure at UMass Lowell. This has always been a lecture course with little in the way of a hands on lab component. Process control is a fairly difficult course with a great deal of underlying complex theory and having hands on lab exercises would greatly enhance learning. This lab would contain a variety of cells where students would conduct structured lab experiments involving temperature sensing, pressure sensing, heater temperature control, drive control, switchover techniques and hydraulic controls.



*Please Join Us in Honoring These 2nd Generation
Plastics Faculty by Supporting the Lab Fundraising Campaign*

Any and all funds collected for these lab construction and renovation projects will go towards improving the educational experience for both undergraduate and graduate plastics engineering students. No gift is too large or too small. We have more than 2,500 Plastics Engineering alumni and even small donations from such a large number of alumni would generate very significant funding levels which can be leveraged within the university. Equipment donations are also appreciated when they match the needs of the department. The plastics engineering department does not expect that its alumni will support all of its educational activities, but departments that are able to generate external funds are appreciated and rewarded by the university administration.

We hope you will honor these faculty by making a donation in their name.

\$500 \$250 \$ 100 \$50 Other: \$ _____

- Professor Aldo Crugnola Medical Plastics Laboratory*
- Professor Rudolph Deanin Blending and Compounding Lab*
- Professor Stephen Driscoll Rheology Laboratory*
- Professor Stephen Orroth Extrusion Laboratory*
- Professor Nicholas Schott Process Control Laboratory*

Name: _____

Address: _____

City/State/Zip: _____

Phone: _____ E-mail: _____

My check, made payable to UMass Lowell, is enclosed

Please charge my gift to: VISA MASTERCARD DISCOVER

Card # _____ Exp. Date _____

Signature _____

Or you can also call Daniel Covert at the UML Advancement Office (978)934-2218 with credit card information.

We thank you so much for your support.

Robert Malloy, Chair
Plastics Engineering Department