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News

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Remembering H. Angus Macleod

"It's a small wonder that so many thin filmers have white hair!"

Angus Macleod, one of the most important experts for optical coatings, has passed away. (Credit: Norbert Kaiser).

On April 29 Prof. H. Angus Macleod passed away at the age of 87. He was a unique expert in optical coatings. His work had a substantial influence on optics and photonics as we know it. And he had a good sense of humor. In August 1997 he was cited in Laser Focus World: "It's a small wonder that so many thin filmers have white hair!" Helping people to avoid getting white-haired with coating problems was what he did. And he was a distinguished member of the Editorial Board of Advanced Optical Technology.

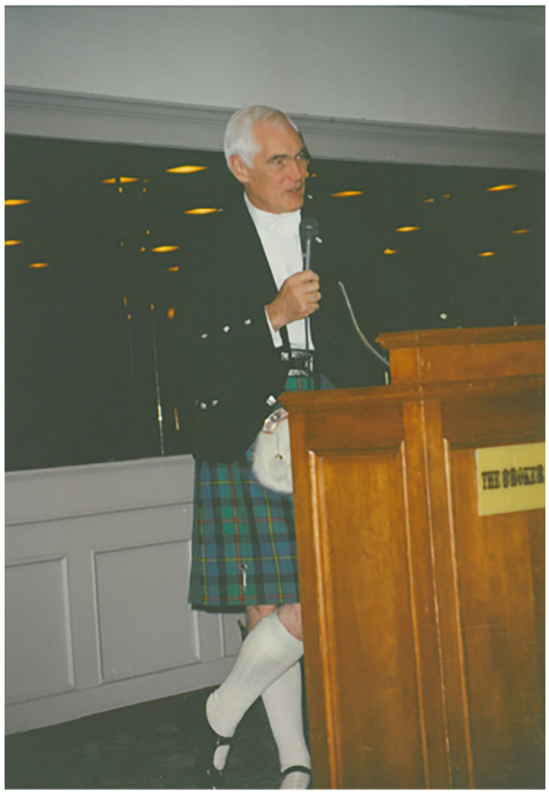
Angus was born and educated in Scotland; he studied natural philosophy at the University of Glasgow. In 1956 he started at Sperry Gyroscope Company as Research Engineer, he "… discovered that most of the other people didn't really understand rigid-body dynamics, and so I got all the problems that involved nutation and vibration and things like that" as he told Donald Mattox in an interview in 2002.

In 1962 he joined Williamson Manufacturing Co. as Chief Development Engineer. "… and they were also getting into the photography business. So, that was a bit of optics. Up until then, I hadn't really done much optics. I suddenly found myself designing optical systems, and came across something called an interference filter, and a book 'The Optical Properties of Thin Solid Films', written by Oliver Heavens, Prof. of Physics, University of York". He never expected that it would be he to write a book on that topic, which for more than 50 years now many have referred to as the bible of coating design.

Before writing the book, he had the chance to learn from the author of the older one: In 1962, when he worked as manufacturing physicists at Mervyn Instruments Ltd., he started to work on the topic that should cover six decades of his life: "I legged it down the road [to Royal Holloway College], saw Ollie Heavens, formed a relationship with him, which has continued ever since, and learned quite a bit from him, drew up some plans for this 12-inch infrared coating machine, and we actually made some multiple-cavity filters for the nitrous oxide line in the infrared."

It was 1969 when his book Thin-film Optical Filters was first published. At that time, he led the thin film division at Parsons & Company in Newcastle Upon Tyne. He soon started a scientific career as a Reader in Thin Film Physics in Newcastle Upon Tyne Polytechnic. It could have been a quiet life.

But then he took a phone for a call from America: "I'm Peter Franken and I'm the Director of Optical Sciences Center at the University of Arizona. If we were to offer you a Professorship in Optical Sciences, would you consider it?" Angus did not think twice: "I said, 'Yes, I'd consider it.' I mean, a question like that to a Scotsman, a Scotsman will consider anything. 'We have this university at the South Pole. Would you consider it?' 'Of course, I'd consider it."



Angus MacLeod in his native stockings at the Boulder Damage Symposium 1993. (Credit: Norbert Kaiser).

Angus playing piano at the Topical Meeting on Optical Interference Coatings, Tucson, 2007. (Credit: Norbert Kaiser).

At the University of Arizona Angus was Professor for Optical Sciences from 1979 to 1995. Beside educating generations of physicists, he worked in numerous fields: coatings for telecom, deposition and microstructure, color, monitoring, theory, and standardization, to name but a few.

In 1986, Angus cofounded Thin Film Center, Inc. which provides software for optical thin film design, analysis and fabrication. When he retired from academia in 1995, he did so to devote more time to his company.

But he never stopped sharing his knowledge. He travelled a lot and his courses on "Optical Thin Films" became famous around the world. He inspired many people who valued him for so much more than just being a brilliant physicist. He was a gifted piano player and he possessed very broad general knowledge.

Germany, and particularly Jena, was a frequent destination for him. In the nearby town of Weimar, he visited the house of the famous German poet Johann Wolfgang von Goethe. At this occasion, Angus explained to his colleague and friend Norbert Kaiser from Fraunhofer IOF what Goethe wrote in a letter to fellow philosopher Jacobi: "Light is the simplest undivided, most homogeneous being that we know. Opposite him is the darkness." It seems obvious that such broad general knowledge and a borderless attitude of thinking were essential in Angus' talent to understand thin optical films and to teach this knowledge to several generations of experts.

Angus wrote in his preface to the Fourth Edition of his book: "The field of optical thin films has been very good to me. I cannot imagine a friendlier, supportive, and open group of people than the international optical thin-film community. It sets an example the rest of the world would do well to follow."

This obituary would not have been possible without the generous support of Angus' old friend (and AOT board member) Norbert Kaiser. Norbert helped me with all the photos, stories, and quotes, for which I would like to thank him very much.

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News from the European Optical Society

EOSAM 2021 is coming hybrid

The Annual Meeting of the European Optical Society EOSAM in Rome is coming closer. Fortunately, the pandemic has slowed down and we can hope for an onsite meeting. EOSAM, the European Optical Society Annual meeting, is a major international scientific conference with industrial exhibition, held 13–17 September 2021 onsite in Rome Italy. We will provide the option to present/attend online for those who cannot attend in person. While we strongly aim for an in-person meeting with some hybrid elements, the final form will depend on the sanitary and legal situation at the time of the meeting.

This year a record-breaking number of topical meetings are included, covering all topics on optics and photonics!

EOSAM has been established specifically to provide a platform for experts in the field of optics and photonics, bringing forth new research results, the state of the art, and bridging the gap between research, education, and industry. EOSAM is annually attended by top researchers, key leaders, students, and industry experts.

A full week of novel research results presented from the widest range of optics and photonics fields (covering all topics), tutorials, special sessions on EU project dissemination and Grand Challenges of Photonics, along with networking events will make the event worth a visit!

Topical meetings and sessions

The record-breaking number of topical meetings cover all topics under optics and photonics:

- Silicon Photonics and Guided-Wave Optics
- Computational, Adaptive, and Freeform Optics
- Optical System Design, Tolerancing, and Manufacturing
- Bio-Medical Optics
- Resonant Nanophotonics
- Optical Materials: Crystals, thin films, organic molecules and polymers, syntheses, characterization, and devices
- Thermal radiation and energy management
- Nonlinear and Quantum Optics
- Optics at Nanoscale (ONS)
- Optical Microsystems (OMS)
- Waves in Complex Photonic Media
- Optofluidics
- Ultrafast Optical Technologies and Applications
- Advances and Applications of Optics and Photonics
- EU Project Session
- Early Stage Researcher Session organized by SIOF
- Grand Challenges of Photonics Session

Plenary speakers

EOSAM includes seven high-level plenary speakers covering topics on transposing polarized methodologies, meta optics, ultrafast response, dielectric metasurfaces, and more:

- “Polarized microscopy, towards molecular-organization imaging in cells and tissues” Sophie Brasselet, Research Director CNRS (directeur de recherche CNRS) at Mosaic, Institut Fresnel, France
- “Meta-optics: From Flat Lenses to Cameras and Structured Light” Federico Capasso, Professor at Harvard University, USA
- “Ultrafast optical response of two-dimensional materials”, Giulio Cerullo, Professor at Politecnico di Milano, Italy
- “Harnessing coherence and computational imaging for nanoscale structure characterization using X-rays” Manuel Guizar-Sicairos, Beamline scientist at Paul Scherrer Institute, Switzerland (Part of the ICO Prize Ceremony: ICO Prize Winner 2019)
- “Coherent focal plane arrays in silicon photonics, towards high performance 3D Imaging using LIDAR” Remus Nicolaescu, CEO/Co-founder at Pointcloud, USA
- “Tunable, light-emitting and nonlinear all-dielectric metasurfaces” Isabelle Staude, Professor at University of Jena, Germany
- “Molecular level metrology and imaging with topological light and free electrons” Nikolay I. Zheludev, Deputy Director (Physics) of the Optoelectronics Research Centre, University of Southampton, UK, and Nanyang Technological University, Singapore

Read more about our plenary speakers and their presentation topics:

https://www.europeanoptics.org/pages/events/eosam2021/program/plenaries.html

For more information, updates, and news, please visit: www.eosam2021.org

EOSAM2021 will be held on Sept 13–17th in the premises of the University of Rome, Engineering Faculty.

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Conference calendar

The conference business is returning! still, regulations in response to the worldwide pandemic may lead to delays, cancelations or hybridization of events.

The pandemic may offer new opportunities as well. Please visit the website of a conference you missed. Some offer on-demand viewing of the meeting. And most often, it is for free!

2021

September

EOS Annual Meeting
Paris, France
13.–17. September 2021
www.europeanoptics.org/events/eos/eosam2021.html

DGaO Tagung
Bremen, Germany
21–23 September 2021
www.dgao.de

SPIE Optical Systems Design
Security + **Defense**
Remote Sensing
Madrid, Spain
13.–16. September 2021
https://spie.org/x138426.xml

SPIE Photomask Technology + **EUV Lithography**
Monterey, CA, USA
26.–30. September 2021
https://spie.org/x126645.xml

October

OSA Laser Congress
ASSL, LAC
Toronto, Canada (hybrid)
3–7 October 2021
www.osa.org/Meetings/OSA_Meetings/Laser_Congress

VISION
Stuttgart, Germany
5.–7.10.2021
www.messe-stuttgart.de/vision/

27th International Semiconductor Laser Conference (ISLC)
Potsdam, Germany
10.–14. October 2021
www.islc2021.org/home

SPIE Optifab
Rochester, NY, USA
18–21. October 2021
https://spie.org/x125984.xml

November

Frontiers in Optics + **Laser Science**
Washington, DC, USA
31. October–4. November 2021
www.frontiersinoptics.com/home/

2022

Photonics West
San Francisco, CA, USA
22.–27. January 2022
https://spie.org/pw

SPIE AR|VR|MR
San Francisco, CA, USA
23.–25. January 2022
https://spie.org/x137983.xml

Optical Fiber communication
San Diego, CA, USA
6–10 March 2022
www.ofcconference.org

SPIE Photonics Europe
Strasbourg, France
3.–7. April 2022
https://spie.org/PE

Laser World of Photonics
Munich, Germany
26.–29. April 2022
www.laser.de

AKL'22
Aachen, Germany
4.–6. May 2022
www.lasercongress.org

CLEO
San Jose, CA, USA
15.–20. May 2022
www.cleoconference.org

DGaO Tagung
Gent, Belgium
7.–10. June 2022
www.dgao.de

LASYS
Stuttgart, Germany
21.–23. June 2022
www.messe-stuttgart.de/lasys/