

OPTICAL SOCIETY

ROCHESTER SECTION

ROSA News

September 2011

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Fall program update...

Our fall program kicked off this month with two great talks from Dan Harris (Naval Air Systems Command) and Conrad Wells (ITT). Our next talk of the year will be on Tuesday, October 11th where Vladimir Ignatovich (Joint Institute for Nuclear Research, Frank Laboratory of Neutron Physics) will speak on "Total internal reflection in a gain medium and its application to ball lightning." This will be followed by a plant tour of local optics company Sydor Optics on Tuesday October 25th. Please join us! The rest of the fall and spring program can be accessed at <http://www.osarochester.org/calendar.html>.

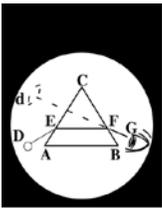
Full time tenure track optics faculty wanted at MCC...

The Engineering Technology Department at MCC is seeking applicants for a full time tenure-track teaching position in the Optical Systems Technology program beginning January 1, 2012. Optics Systems Technology is housed in MCC's Engineering Technologies Department along with Applied Integrated Technology, Construction Technology, Electrical Engineering Technology, and Mechanical Technology. The department welcomes candidates who are committed to MCC's mission of success and academic excellence. In addition to excellent academic credentials, candidates should have a desire to work in a diverse and dynamic environment, be able to demonstrate a love of teaching, have a desire to create partnerships with local industry, and have the ability to design innovative learning experiences to explain technology concepts. Highly motivated candidates should also demonstrate a passion for lifelong learning and continuous improvement in the classroom. The successful candidate will, in addition to teaching responsibilities, be the Optics Program Coordinator. The Coordinator's responsibilities include, but are not limited to, working with the Optics industry and the college's marketing team to promote and build enrollments in the program, master schedule management, student recruitment, industry collaboration, strengthening existing and creating new transfer and articulation agreements, career placement, and working as a liaison for workforce development training opportunities. More information on the position can be found at <https://jobs.monroecc.edu/postings/865>.

A Bit of History ... by Mari de Wit

This month's spotlight is on G.A. Hermann Kellner, who served as our second local ROSA president in 1916. Throughout his life the microscope was always his favorite optical instrument. His interests were not confined to his professional work. He was very fond of music and art. Watch making was also a favorite hobby, and he had an extensive collection of watches and chronometers that date back to the early history of the art.

Did you know... Dr. Kellner was the first appointed editor for JOSA. Originally trained and practicing in Germany, Kellner was meticulous in his efforts to establish and maintain the highest scientific standards for the journal. Individuals familiar with his efforts reported that many submissions were bottlenecked on his desk while others were rejected as substandard. He and Nutting agreed to set the tone in the first issue as one of highest possible technical quality and original work only. **The result was a thin but first-rate journal.**



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BIOGRAPHY:

- Dr. Hermann Kellner was born July 20, 1873. He studied at the Universities of Berlin and Jena, receiving the doctorate (PhD) from the latter in 1899. He spent several years in the optical industries in Germany.
- Sometime between 1900 and 1905 Spencer Lens Co. obtained two Germans, one of whom was Dr. Hermann Kellner, an optical designer and controller of optical quality. Dr. Kellner was a man of excitable and nervous temperament. It is difficult to determine just what contributions Dr. Kellner made to the optical design of microscope objectives while at Spencer. It is certain, however, that he did not produce any first rate apochromatic objectives.
- Because of ill health Dr. Kellner returned to Germany in 1905, but returned later to America and became Director of the Scientific Bureau of the Bausch and Lomb Optical Co. There he worked mainly on the microscope and fire-control instruments and later on projection systems.
- Dr. Kellner was a charter member of the Optical Society of America and the first editor of its journal (from 1917 to 1919).
- He remained at B&L until his death on January 18, 1926.

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$\phi = 7.4$		15.40 4.300 7.00 17.92	0.2400 0.3439 0.2400
$\phi = 6.2$		3.88 4.00 30.00	0.2485 0.3276
		1.9685	Chance H.Cr. (Hard Crown)
		0.18	Cover gl.

Example of Personal Correspondence: Dr. Kellner wrote to Spencer Lens Co. from Berlin as follows:

Spencer Lens Company, Buffalo, New York
Gentlemen:

I am in receipt of your letters from May 26th and June 23rd and beg your pardon for not answering sooner, but I had a bad nervous collapse of the good old Buffalo style and was utterly unable to write a decent letter.

... testing and judging the quality of objectives, for one of course can only show faults in bad objectives and they are only to be seen and to be had in the factory by watching the manufacturing of the lenses.

Funny enough I had two offers, since I am here in Germany, to go to foreign countries again. But I love Berlin too much and then matters in my family have turned so unfortunately (in financial respect) that I cannot afford to leave here unless I am offered a very high compensation.

I am, of course, glad to give you that other 4 mm apochromatic formula "528" as you call it. The objective was made by me simply as a study, not as an object for the manufacturing. The focal distance is 4.12 mm instead of 4.00 mm; therefore, the lens gives less magnification. Concerning the glass No. 112 I will write you tomorrow. This letter has to go as to catch tomorrow's boat.

With kind regards to you all,

1905 July 10

H. Kellner

OTHER ACHIEVEMENTS & REFERENCES:

Neue Rille nördlich von Hyginus (1893)

Hermann Kellner

Astronomische Nachrichten, vol. 132, issue 13, p. 207–208

doi: 10.1002/ASNA.18931321308

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An apparatus for testing the perception of depth - (1923)

Kellner, Hermann

Journal of the Optical Society of America, vol. 7, issue 10, p.857

doi:10.1364/JOSA.7.000857

<http://www.opticalheritagemuseum.org/pdfs/SpencerLensCompanyArticle.pdf>

http://www.optics.rochester.edu/~stroud/BookHTML/ChapI_pdf/I_02.pdf

