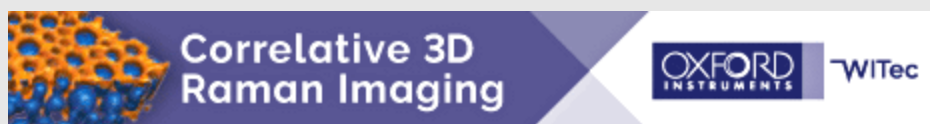


SOCIETY FOR APPLIED  **SPECTROSCOPY**

MAY 2024 NEWSLETTER



New York Capital Region Symposium



**The Third Annual
New York Capital Region SAS
Applied Spectroscopy Symposium**
Theme: Molecules and Masterpieces



**Keynote Speaker:
Fenella France, PhD**
Talk Title: Heritage Science Exposed
Library of Congress

Abstract Deadline: May 17th, 2024

Symposium Date: June 21st, 2024
More details will be released soon!

Visit our Website!
Symposium page:
<https://nycrsas.wixsite.com/nycrsas/team-3>

**Scan To Submit
Abstract**





Sponsored By: **THORLABS**

Jared Viggers, New York Capital Region Student Section, SAS

Early Career SciMix Announcement

Are you an Early Career Interest Group (ECIG) member with plans to attend SciX 2024? If so, watch this newsletter space for future announcements regarding ECIG's events at SciX. Currently, we are planning a special symposium that will highlight a variety of career paths available in spectroscopy and the challenges faced by scientists when making the transition from school to a professional career. We are also developing our plans for this year's special social event. As more details become available, we will share them here.

Anthony Stender, Early Career Interest Group

Trends in Atomic Spectroscopy Symposium

The Atomic Section of SAS recently partnered with Spectroscopy magazine to host a virtual symposium online entitled: "The Latest Trends in Atomic Spectroscopy". Several SAS members presented their latest research. Featured speakers included:

Aaron Hineman (PerkinElmer)
Alicia Stell (CEM Corp.)
Yan Cheung (Agilent)
Raquel Gonzalez de Vega (University of Graz)
R. Kenneth (Ken) Marcus (Clemson University)
Eduardo Bolea-Fernandez (University of Zaragoza)
Dula Amarasiriwardena (Hampshire College)
Christian Dewey (University of Minnesota)
Hunter Andrews (Oak Ridge National Laboratory)
Alexander Gundlach-Graham (Iowa State University)

The talks can still be viewed [here](#).

Steven Ray, 2024 SAS President-Elect

Behind the Shades: The Science of Safe Eclipse Viewing with Solar Filters

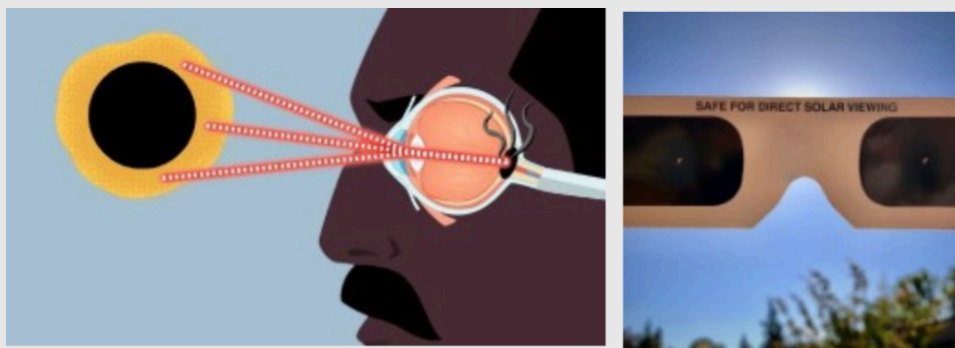
Did you catch a glimpse of the eclipse? If you did, hopefully, you did so with proper eye protection! Remember that solar radiation contains spectral bands, including the ultraviolet (UV) and infrared (IR) radiation, at intensity levels that could obliterate your retinæ – the specialized optical sensors in our eyes.

But have you wondered about the science behind those eclipse glasses? Well, they're not just any old shades—they're like the superheroes of eyewear! Solar filters employed in eclipse glasses are engineered to safeguard your eyes from the sun's intense radiation while allowing safe observation of solar phenomena. These filters are crafted from materials with unique optical properties tailored for solar viewing applications. One of the most commonly used materials is solar viewing film, a material that consists of multiple layers of precisely engineered coatings deposited onto a durable substrate, such as polyester film.

The coatings on solar viewing film serve several critical functions. Firstly, they are designed to absorb or reflect specific wavelengths of light, specifically targeting UV and IR radiation, while permitting safe levels of visible light to pass through. This selective absorption ensures that only a fraction of the sun's intense energy reaches your eyes, minimizing the risk of eye damage during solar observation. Moreover, the coatings on solar viewing film are engineered to have high optical density, meaning they effectively block out most of the sunlight without significantly compromising the clarity of the image. This ensures that you can enjoy a clear and unobstructed view of solar phenomena, such as eclipses, without risking your vision.

Additionally, the materials used in solar viewing film undergo rigorous testing to ensure they meet stringent safety standards. This certification guarantees that the eclipse glasses provide adequate protection against harmful solar radiation and comply with internationally recognized safety guidelines.

So, the next time you wear eclipse glasses, remember that you're not just watching a cosmic spectacle—you're strapping on a shield for your eyesight!



Eye protection during an eclipse is crucial to not only watch the cosmic event but also to keep your eyes safe! Credit: Eric Henrikson/KXAN and By Taylor Kamnetz.

Alejandro De La Cadena Perez Gallardo, Newsletter Committee Member

Eclipse Viewing in New York

The Niagara Frontier Section of and University of Buffalo Student Section of SAS recently partnered with the U.S. National Science Foundation (NSF) to deliver over 12 500 pairs of eclipse glasses to K-12 schools in the area. A grant from the NSF provided the eclipse glasses, and SAS members as well as local members of the Western New York parent teacher association distributed the glasses to 41 educational institutions in Buffalo, NY ahead of the 18 April 2024 total eclipse. While the day was partly cloudy during the four minutes of total eclipse at 3:18 PM, clouds did clear enough to view the 'ring'.

Students in New York show off their eclipse glasses!



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Gloria Story, 2024 SAS President

Do you have something spectroscopy-related you want to discuss in the newsletter? Or something that will help our membership such as career tips or application tips? Please let us know by emailing konnorkjones@gmail.com