

About OMICS Group

OMICS Group International is an amalgamation of [Open Access publications](#) and worldwide international science conferences and events. Established in the year 2007 with the sole aim of making the information on Sciences and technology 'Open Access', OMICS Group publishes 400 online open access [scholarly journals](#) in all aspects of Science, Engineering, Management and Technology journals. OMICS Group has been instrumental in taking the knowledge on Science & technology to the doorsteps of ordinary men and women. Research Scholars, Students, Libraries, Educational Institutions, Research centers and the industry are main stakeholders that benefitted greatly from this knowledge dissemination. OMICS Group also organizes 300 [International conferences](#) annually across the globe, where knowledge transfer takes place through debates, round table discussions, poster presentations, workshops, symposia and exhibitions.

About OMICS Group Conferences

OMICS Group International is a pioneer and leading science event organizer, which publishes around 400 open access journals and conducts over 300 Medical, Clinical, Engineering, Life Sciences, Pharma scientific conferences all over the globe annually with the support of more than 1000 scientific associations and 30,000 editorial board members and 3.5 million followers to its credit.

OMICS Group has organized 500 conferences, workshops and national symposiums across the major cities including San Francisco, Las Vegas, San Antonio, Omaha, Orlando, Raleigh, Santa Clara, Chicago, Philadelphia, Baltimore, United Kingdom, Valencia, Dubai, Beijing, Hyderabad, Bengaluru and Mumbai.



Anticipating an Advance in Forensic DNA

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Bob Blackledge

**is a Forensic Chemist Consultant
from El Cajon, CA, USA.**

In his 35+ years in forensic science, Bob is best known for his many publications and presentations related to physical evidence in sexual assault cases. There are far too many to list here, but you can get a good idea by doing an Advanced Google search and entering “Robert D. Blackledge”, “sexual assault”, and “forensic science.”

Biography

Blackledge received a BS (chem.) from The Citadel, Charleston, South Carolina, in 1960 and MS (chem.) from the University of Georgia, Athens, Georgia, in 1962. Starting with the Florida Department of Law Enforcement's Tallahassee Crime Lab in 1971, Bob worked in forensic science for over thirty-five years. Stops included eleven years with the U.S. Army Criminal Investigation Laboratory-Europe, and with "Abby's" NCIS Lab in San Diego from 1989 to 2006. The author or co-author of over fifty journal articles and book chapters, he is the editor of, "*FORENSIC SCIENCE ON THE CUTTING EDGE: New Methods for Trace Evidence Analysis*", Wiley-Interscience, 2007.

NCIS Lab – Yes, you guessed it.
He was the inspiration for “ABBY.”



Research Areas



Condom Trace Evidence

Lubricants, spermicides, antioxidants, particles

<http://projects.nfstc.org/trace/docs/Trace%20Presentations%20CD-2/keil.pdf>

Condom Trace Evidence in Sexual Assaults

<http://crimeandclues.com/2013/01/27/condom-trace-evidence-a-new-factor-in-sexual-assault-investigations/>

Soluble proteins from latex condoms

QA/QC at the Condom Factory



But not this time

TITLE: Anticipating an Advance in Forensic DNA

Abstract

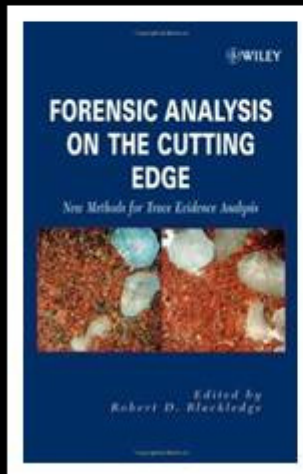
How many Cold Cases will go unsolved because the necessary evidence was never collected and stored? In the past we have been fortunate that in cases of sexual assaults and homicides the protocols for crime scene processing, evidence collection, SANE examinations, and autopsies were adequate to permit the examination of collected and saved evidence even as new, more sensitive methodology evolved. Did we anticipate the advance in blood stain typing from ABO to enzyme systems? **No**. Enzyme systems to the advent of DNA and Alec Jefferies' RFLP? **No**. Discovery of the PCR reaction? **No**. Low copy number (touch) DNA? **No**. It's only through dumb luck those in the Innocence Project have jobs!

Anticipating an Advance in Forensic DNA

This presentation will alert you to a type of evidence that in the future (not now), will identify the assailant (or exclude someone falsely charged) in cases of sexual assault/homicide where there has been intimate contact between the assailant and victim. Its collection would be quick and easy, and not require new technology. Why is it not being collected now? At this time it is of no value. How long will it take for the necessary technology to advance? I can't say, but I guarantee it will happen far sooner than most "experts" would predict. Do you recall how long these same "experts" said it would take to sequence the entire human genome? We don't want to look back and say: "would have, could have, should have." We must be proactive and insist on its collection NOW!

Research Areas

Trace Evidence



FORENSIC ANALYSIS ON THE CUTTING EDGE: New Methods for Trace Evidence Analysis

**2007, Robert D. Blackledge, Editor, Wiley Interscience
ISBN 978-471-71644-0**



**“The Increasingly Diverse and Challenging
Discipline of Trace-Evidence Analysis”, Evidence
Technology Magazine, Nov.-Dec. 2008 (Vol. 6, No. 6),
on line at:**

**[http://www.evidencemagazine.com/index.php?option
=com_content&task=view&id=117&Itemid=49](http://www.evidencemagazine.com/index.php?option=com_content&task=view&id=117&Itemid=49)**

Research Areas

Glitter as Trace Evidence

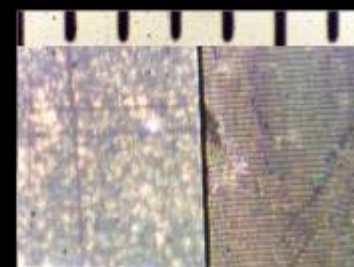
"GLITTER as Forensic Evidence",
Aug. 2007, on line at:

http://projects.nfstc.org/trace/docs/final/Blackledge_Glitter.pdf



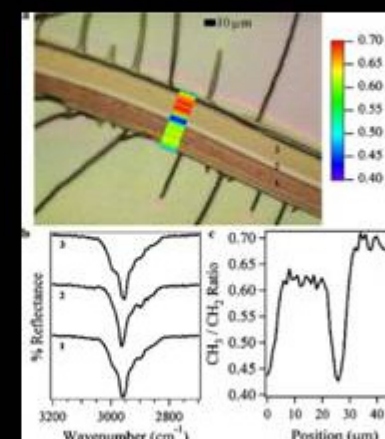
"Holographic Glitter", *Modern Microscopy*,
2/23/2010 Kurt Gaenzle, Ed Jones, and Bob
Blackledge. An online journal available at:

www.modernmicroscopy.com/main.asp



"Characterization of Multilayered Glitter Particles Using
Synchrotron FT-IR Microscopy", *Forensic Science
International*, 2011, 210(1), 47-51 Laetitia Vernoud,
Michael Martin, Hans Bechtel, John Reffner, and Bob
Blackledge. Also available online at:

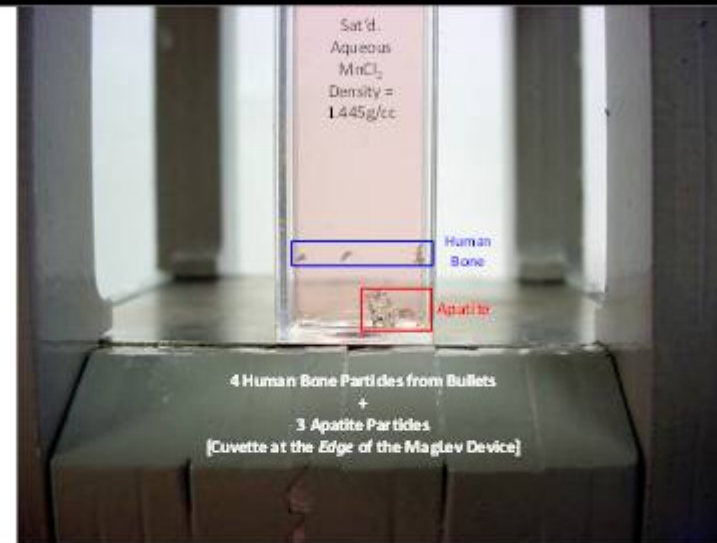
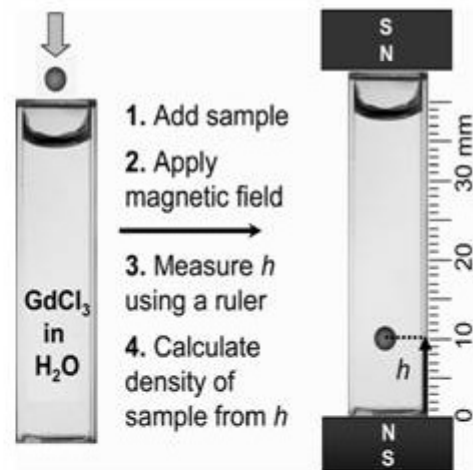
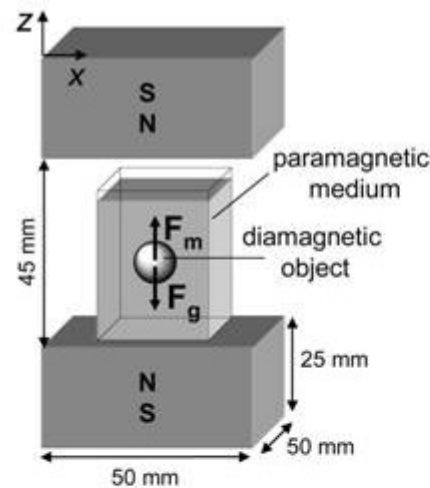
<http://infrared.als.lbl.gov/Publications/2011/VBMRB11/>



Research Areas

Density Determination Via Magnetic Levitation

“Analyzing Forensic Evidence Based on Density with Magnetic Levitation,”
Matthew R. Lockett, Katherine A. Mirica, Charles R. Mace, Robert D.
Blackledge, and George M. Whitesides



Available online at: <http://gmwgroup.harvard.edu/pubs/pdf/1171.pdf>

Research Areas

Application of X-Ray Photoelectron Spectroscopy to Forensic Science

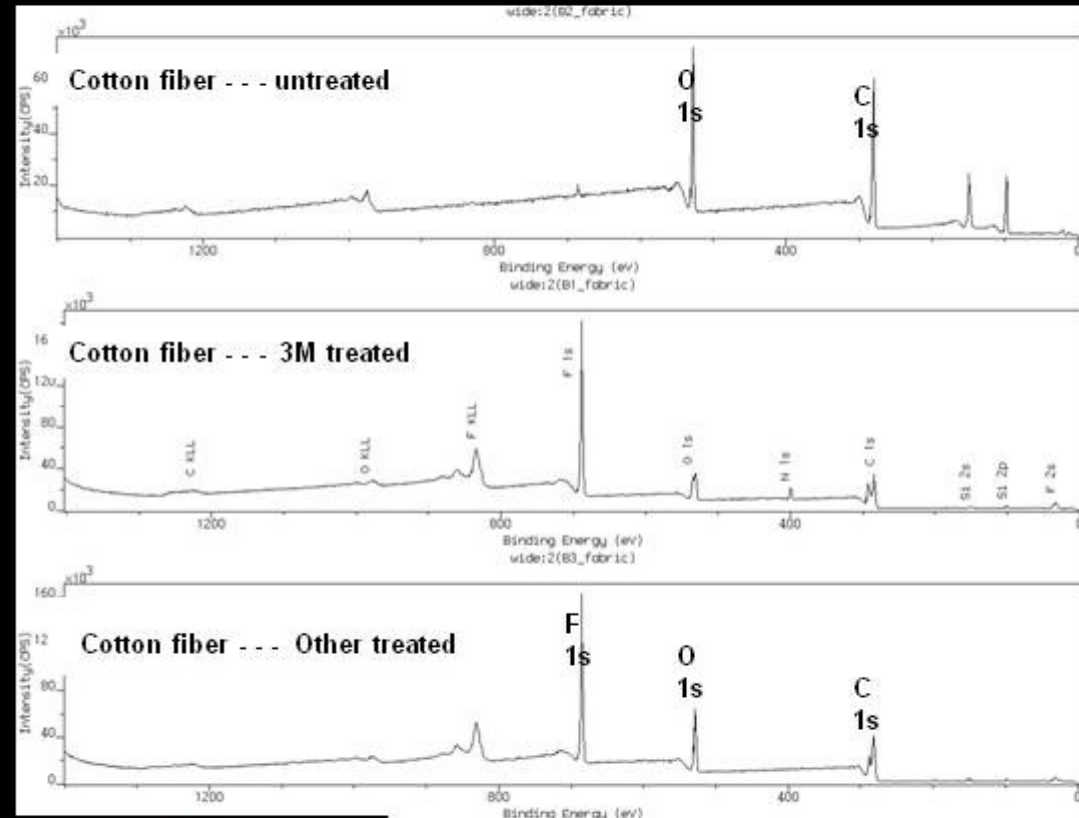
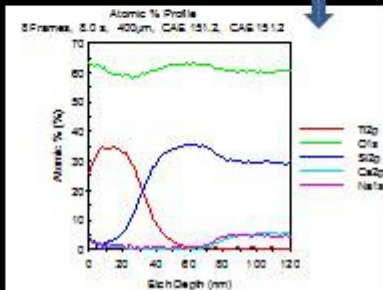
Fiber Surface Modifications

Hair Chalk

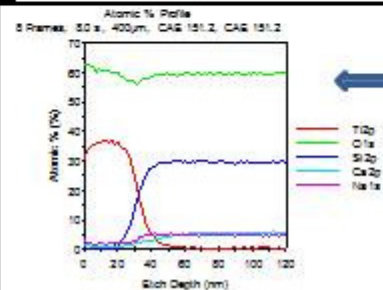


Glass

XPS Depth Profile: Pilkington Activ™ Self-Cleaning Glass



XPS Depth Profile: PPG SunClean® Self-Cleaning Glass



Bob's talks are often about condoms



COWBOY & THE CHEMIST

Cowboy: Gimmie three packs of them there condoms.

Chemist: Will you be needing a bag, Sir?

Cowboy: Nope - she ain't THAT ugly!

Let Us Meet Again

We welcome you all to our future conferences of
OMICS Group International

Please Visit:

www.omicsgroup.com

www.conferenceseries.com