

36th Annual Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS 2009)

Tomorrow's Analytical Sciences Today!

**And the National Meeting of the Society for Applied Spectroscopy
(SAS)**

**Louisville, Kentucky, USA
18-22 October 2009**

ISBN: 978-1-63439-419-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2009) by the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS)
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) at the address below.

Federation of Analytical Chemistry and Spectroscopy Societies (FACSS)
PO Box 24379
Santa Fe, NM 87502

Phone: (505) 820-1648
Fax: (505) 989-1073

facss@facss.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Attention Presenters: Check this final program to verify the schedule of your talk or poster. Changes may have occurred since the preliminary program.

	Page
Welcome	2
General Information.....	3
Conference Location	
Speaker/Poster Information	
Internet Access	
Regulations	
Special Events	
Companion Registration	
Events of Special Interest to Students.....	4
Employment Bureau.....	4
FACSS Organization.....	5
FACSS Chairs.....	6
Program Sponsors	8
Advertisers	8
Floor Plans	9
Awards	
FACSS Distinguished Service Award.....	10
Tomas Hirschfeld Scholar	11
FACSS Student Award	11
ANACHEM Award	12
Charles Mann Award	12
SAS Distinguished Service Award	13
SAS Honorary Membership Award	14
SAS Lester W. Strock Award.....	14
SAS Applied Spectroscopy William F. Meggers Award	15
SAS Graduate Student Award	16
SAS Fellows Awards	17
Coblentz Society Clara Craver Award.....	20
Coblentz Student Awards	20
Previous FACSS Board and Meeting Chairs	21
Society and Committee Meetings	23
Wednesday Evening Event.....	23
Exhibitors	24
Exhibitor Descriptions	25
FACSS Workshops	31
Program Highlights	34
Program Overview	35
Technical Overview by Topic	37
Technical Program	
Young Investigators	39
Sunday	40
Monday	41
Tuesday	48
Wednesday	55
Thursday	62
Abstracts.....	67
Author Index	194

FACSS International Office

2019 Galisteo Street, Building I-1, Santa Fe, NM 87505

(505) 820-1648 O Fax: (505) 989-1073 O facss@facss.org O www.facss.org