# Alan George Marshall CURRICULUM VITAE 19 March, 2010

B.A. (Chemistry, Honors)	Northwestern U. (Evanston)	1965
Ph.D. (Physical Chemistry)	Stanford University	1970
Instructor/Asst. Prof./Assoc. Prof. (Chem)	Univ. of British Columbia	1969/71/76
Professor (Chemistry & Biochemistry)	The Ohio State University	1980-1993
Director, Chemical Instrument Center	The Ohio State University	1980-1993
Professor (Chemistry & Biochemistry)	Florida State University	1993-
Director, ICR Program	Natl High Magnetic Field Lab	1993-
$\mathbf{D}_{\mathbf{a}} = \mathbf{a} \cdot \mathbf{b} \cdot $		

**Personal:** Male, Age 65 (born 26 May, 1944); Married (44 yr): daughter (41), son (37)

**Honors:** 1962: Phi Eta Sigma Freshman Honorary Fraternity

1965: Phi Lambda Upsilon Chemical Honorary Fraternity

1965-69: N.S.F. Graduate Fellow

1976: Alfred P. Sloan Research Fellow

1988: Distinguished Scholar Award, Ohio State University1988: Akron Section Award, American Chemical Society

1989: Fellow, American Association for Advancement of Science

1989: Fellow, American Physical Society

1990: Award in Chemical Instrumentation, American Chemical Society

1991: Award in Analytical Chem., Eastern Analytical Symposium

1995: Field-Franklin Award in Mass Spectrometry, Amer. Chem. Soc.

1997: Maurice F. Hasler Award, Spectroscopy Society of Pittsburgh

1998: Gold Medal, New York Society for Applied Spectroscopy

1999: Distinguished Research Professor, Florida State University

1999: Distinguished Contribution Award, Amer. Soc. Mass Spectrometry

2000: Kasha Professor, Florida State University

2000: Thomson Medal, International Mass Spectrometry Society

2002: Pittsburgh Spectroscopy Award, Spectroscopy Society of Pittsburgh

2002: Award in Analytical Chemistry, American Chemical Society

2002: Florida Section Award, American Chemical Society

2002: Honorary Member, Society for Applied Spectroscopy

2003: Herty Medal, American Chemical Society Georgia Section

2004: Marshall Honor Issue, *International Journal of Mass Spectrometry* 

2004: Fellow (Inaugural Group), Society for Applied Spectroscopy

2004: Southern Chemist Award, Amer. Chem. Soc. Memphis Section

2006: Robert O. Lawton Distinguished Professor, Florida State University

2007: Chemical Pioneer Award and Fellow, American Institute of Chemists

2008: Ralph & Helen Oesper Award, Amer. Chem. Soc. Cincinnati Section

2009: New Frontiers in Hydrocarbons Award, Eni (Italian Energy Co.)

2009: Fellow (Inaugural Group), American Chemical Society

2009: Award in Mass Spectrometry, Eastern Analytical Symposium

**Publications:** 499 refereed publications in print or accepted

1,595univ/govt/industry seminars; talks & posters at scientific conferences 5 U.S.A. patents (incl. 1st & primary patent on FT mass spectrometry): 4 books

>770 FT-ICR MS systems (>1,600 total FT-MS systems) worldwide

**Citations:** >18,500; Average ~35 per Marshall publication; Hirsch Number = 67

**Editorial Board:** Int'l Journal of Mass Spectrometry & Ion Processes (1987-)

**Editorial Board:** Mass Spectrometry Reviews (1994-)

**Editorial Board:** Ann. Rev. Analytical Chemistry (2009-2013)

Editorial Board: J. Am. Soc. Mass Spectrometry (1989-97; 1999-2004, 2009-14)

**Editor/Edit. Board Amer. Soc. Mass Spec.: Ace Hitter:**Rapid Commun. in Mass Spectrometry (1988-2004/2005-)

VP Programs, 2003-04; President, 2005-06 (7,000 members)

Canadian Men's Open Volleyball National Champions, 1978

# Invited plenary/keynote speaker:

Mass Spectrometry National Societies:

Australia/New Zealand (92) France (93/07) Japan (94/99) Austria (03) Britain (98/08) Germany (93/03) Switzerland (00) Russia (05,07) Korea (08) Canada (92/96/99) India (91) U.S.A. (89/96/99) Brazil (05) Taiwan (09)

Anakon (Swiss/German/Austrian) Analytical Conf. (97)

ACS Nat'l Mtgs (Award Addresses: Instrum'n (90); Field-Franklin (95); Analytical (02)

Foreign Chemical Society National Meetings: Canada (93), Switzerland (86), Israel (06)

Asilomar Mass Spectrometry Conference (86/89/92 (co-chair)/00/08 (co-chair))

Sanibel Conference on Mass Spectrometry (90, 03)

Gordon Conferences: Analytical Chemistry (87/93); Magnetic Resonance (97)

Isotopes in Chem. and Biology (00); Natural Products (00)

Hydrocarbon Resources (01); Gaseous Ion Chem. (01,09)

International Mass Spectrometry Triennial Conferences (85/88/91/97/00/06/09)

Council for Chemical Research (92); Exptl NMR Conf. (94) FACSS (06) PittCon (2010)

Nobel Symp. on Trapped Ions (94/10); Int'l Conf. on Fourier Transform Spectroscopy (97)

ASTAT Conference (Mexico 03); N. Amer. FT-MS Conf. (Key West, FL 05/09)

Proteomics/Genomics: Britain (04/05); Canada (05 (2)); Keystone (04); UCSF (84/05)

Int'l Conf. on Petroleum Phase Behavior & Fouling (06, 08)

# **Invited Speaker:**

ACS Natl Mtgs: 73/80/85/86/87/88/90/95/96/97/98/99/00/02/03/04/05/06/07/08(2)/09(2)

American Society for Mass Spectrometry (88/90/92/93/99/00/01/02/03/05/07/10) Eastern Analytical Symp. (84/91/98/09); Soc. Appl. Spectroscopy Tour Speaker 93/08

PittCon (87/89/97/98/99)/01/02/03/04/05/06/08(2)/09/10)

FACSS (87/88/89/92/95/97) PacifiChem (95/05/10)

Other International Mass Spectrometry Conferences (84/85/95/00/01/03/04/07/08/10)

# Honorary/Named Lectures:

Frontiers in Chemistry Lecture, Case Western Reserve U., 1981

Frontiers in Chemistry Lecture, Wayne State University, 1984

DuPont Distinguished Lecture Series, Indiana U., 1987

Frontiers in Chemistry Series Lectures (four), Texas A&M University, 1990

Knight Lecture, U. Akron, 1992

Henry Werner Lecture, U. Kansas, 1993

Frederic LeRoy Conover Memorial Lecture, Vanderbilt U., 1996

Elving Lecture, U. Michigan, 1997

Boomer Lectures (four), U. Alberta, 1997

Spectroscopy Society of Pittsburgh Lecture, Duquesne U., 1998, 2002

Mary Kapp Lecture, Virginia Commonwealth U., 1998

Eli Lilly Distinguished Lecture, Indiana U., 1998

Research Frontiers in Chemistry Lectures (three), U. Iowa, 1998

Kolthoff Lectures in Chemistry (three), U. Minnesota, 1999

Foster Chemical Colloquium, SUNY Buffalo, 1999

Merck-Frosst Lecture, U. British Columbia, 1999

Ben Freiser Lecture, Purdue U., 2000

Frontiers in Chemistry Lecture, Brigham Young U., 2001

Frontiers in Chemistry Lecture, Wayne State University, 2001

Phi Lambda Upsilon Lecture, Kansas State University, 2002

GlaxoSmithKline Lecture, U. North Carolina, 2003

Wolfgang Paul Lecture, German Mass Spectrom. Soc., Münster, Germany, 2003

Mack Lectures (two), Ohio State U., 2003

FMC Discovery Lecture, 2005

Welch Lectures: Texas A&M University; University of Dallas; Austin College, 2005

Fred. M. Weissman. Lecture, U. South Carolina, 2006

Abelson Lecture, Washington State U., 2006

G. F. Smith Lectures (two), U. Illinois Urbana, 2007

(Inaugural) Distinguished Scientist Lecture, Environmental Molecular Sciences Lab (PNNL)

PittCon Lectures (two), U. Pittsburgh, 2010

1 textbook (Biophysical Chemistry; 832 pp., 2 printings; also in Russian) **Books:** 

> 2 edited books (*Transforms in Chemistry*; Asphaltenes/Petroleomics)) 1 monograph (Fourier Transforms in NMR, Optical, & Mass Spectrometry:

A User's Handbook, 460 pp.); subsequent French version.

Other Distinctions: Phi Lambda Upsilon Chemical Honorary Fraternity (1965)

Elected to Sigma Xi (1980)

Elected to New York Academy of Sciences (1981)

Elected to American Society of Biological Chemists (1983) Soc. Applied Spectroscopy Ohio Valley Section Award (1989) Distinguished Research Fellow, Oak Ridge Nat'l Lab (1990)

Two-Year Creativity Award, N.S.F. (1997)

Focus Issue, J. Am. Soc. Mass Spectrometry (2001)

60th Birthday Honor Issue, Int. J. Mass Spectrom. (2004)

**Editor-in-Chief:** OSU/NHMFL ICR/Ion Trap Newsletter (1986-2002)

**Editorial Board** Chemometrics and Intelligent Laboratory Systems, 1986-89

**Edit'l Advisory Board:** Analytical Chemistry (1990-92)

ACS Encyclopedia of Chemical Instrumentation (1992-95) Int'l Edit'l Adv. Board:

Scientific Advisory Board: Perkin-Elmer/Sciex (1996-97) Gill Center, Indiana U., 1998-2001 **Advisory Board:** 

**Editorial Board:** Encyclopedia of Mass Spectrometry (2000-) **Editorial Board:** Journal of Magnetic Resonance (1996-2000)

Adviser: National Science Foundation (NSF) in Taiwan (2002-)

Oak Ridge Nat'l Lab DOE Genomes to Life Program (2003-04) **Advisory Panel** 

Soc. Appl. Spectroscopy Ohio Valley Section, 1990-93 Chairman:

19th Regional Amer. Chem. Soc. Mtg. (Columbus, OH, 1986) General Chairman:

American Chemical Society Central Region, 1987-88 Chairman:

Acting Chair (Chemistry): The Ohio State University, 1988 (1 qtr)

Board Member, 1991-93 Amer. Soc. Mass Spec.:

#### Memberships:

Member and Fellow, American Physical Society

Member and Fellow, American Association for the Advancement of Science

Member and Fellow, Society for Applied Spectroscopy Member and Fellow, American Institute of Chemists Member and Fellow, American Chemical Society Member, American Society for Mass Spectrometry

Member, Sigma Xi

#### Marshall Current Research Group

#### Marshall Prior Research Group

12 Ph.D. Students

7 Postdoctoral Research Associates

5 Ph.D. Scholar-Scientists

1 Technician

1 Machinist

1 Administrative Assistant

11 M.S. degrees

52 Ph.D. degrees

57 Postdocs

32 Ph.D.'s/Postdocs went on to university faculty positions