Spectroscopy & the Nobel

October is when scientists around the world await the results from Stockholm. Since the Nobel Prize was established in 1895, a surprising number of the awards have gone to advances related to or enabled by spectroscopy—from the spectral splitting of the Zeeman and Stark effects to cutting-edge advances enabled by laser frequency combs. We offer a small (and far from complete) sample here; to explore further, visit www.nobelprize.org.
1966 CHEMISTRY NOBEL
OSA Fellow Robert F. Curl Jr.,
Richard Smalley and Harold Kroto (not pictured) “for their
discovery of fullerenes”

1999 CHEMISTRY NOBEL
Ahmed H. Zewail
“for his studies of the
transition states of
chemical reactions
using femtosecond
spectroscopy”

1981 PHYSICS NOBEL
Kai M. Siegbahn “for his
contribution to the development
of high-resolution electron
spectroscopy” and OSA
Honorary Members Nicolaas
Bloembergen and Arthur L.
Schawlow “for their contribution
to the development of laser
spectroscopy”

1989 PHYSICS NOBEL
Hans G. Dehmelt
(pictured) and
Wolfgang Paul “for the
development of the ion trap
 technique”

2005 PHYSICS NOBEL
OSA Honorary Members
Theodor W. Haensch
and John L. Hall “for their contributions to
the development of laser-based precision
spectroscopy, including the optical frequency
comb technique”

OSA & the Nobel
Thirty-five OSA members have been awarded the Nobel Prize
1907 Albert Abraham Michelson
1923 Robert Andrews Millikan
1930 Sir Chandrasekhara Venkata Raman
1953 Frederik Zernike
1955 Willis Eugene Lamb
1964 Charles H. Townes
1964 Aleksandr Mikhailovish Prokhorov
1966 Alfred Kastler
1967 Haldan Kekfor Hartline
1967 George Wald
1971 Dennis Gabor
1971 Gerhard Herzberg
1975 James Rainwater
1981 Nicolaas Bloembergen
1981 Arthur L. Schawlow
1996 Robert F. Curl Jr.
1997 Steven Chu
1997 Claude Cohen-Tannoudji
1997 William D. Phillips
2000 Zhores I. Alferov
2001 Eric Cornell
2001 Wolfgang Ketterle
2001 Carl Wieman
2005 Roy J. Glauber
2005 Theodor W. Haensch
2005 John L. Hall
2006 George Smoot
2006 John C. Mather
2009 George E. Smith
2009 Willard S. Boyle
2009 Charles K. Kao
2012 David J. Wineland
2014 Hiroshi Amano
2014 Stefan Hell
2014 W.E. Moerner

Read more about OSA and the Nobel Prize: www.osa.org/nobel