Laboratory Visitors and Their Projects (as of 12/18)

Professor Karen Peterson, University of Rhode Island, 7/4/93, **$(CO)_2$**
Professor Jim LoBue, Ursinus College (now Georgia Southern University), 7/5 - 7/9/93, further **conformations of dipropyl ether**
Professor Robert Bohn and Lou Qi, University of Connecticut, 7/19 - 7/27/93, **methyl ethyl nitrosamine**
Dr. Dan Kohn, Department of Chemistry, Harvard University, 8/2 - 8/6/93, various radicals including **CF_3** and **H_2CCCH**, using Peter Chen's flash pyrolysis source
Professor Kimberley Grant, College of St Elizabeth, 8/9 - 8/13/93, **PF_3 HCl** and **NF_3 HCl**
Dr. Mike McCarthy, Center for Astrophysics, Harvard Smithsonian, 8/17 - 8/20/93, various radicals including **H_2CCCH, HNCN, SO, and HCCN**
Brian Bean, Amherst College, (Brian is an undergraduate student of Professor Mark Marshall, he spent the summer in the lab as a NECUSE student and participated in all the projects, his own personal project was:) **HBr OCS**
Professor Robert Bohn, UCONN, 12/13 - 12/15/93, **3,6 dichloropyridazine**
Professor Jim LoBue, Georgia Southern University, 12/20/93 - 12/24/93, **CO_2 C_6H_6**
Brian Bean, Amherst, 1/3 - 1/7/94, to continue work on **HBr OCS**
Professor Kimberley Grant, College of St Elizabeth, 1/10 - 1/14/94, **$(PF_3)_2$**
Professor Karen Peterson, University of Rhode Island, 5/13, 17, 19, 25/94, **NO H_2O**
Professor Robert Bohn, University of Connecticut, 5/31 - 6/3/94, **methyl ethyl formamide**, **$CH_3(NCHO)CH_2CH_3$**
Professor Karen Peterson, University of Rhode Island, 6/7, 8, 22, 24/94, **NO H_2O**
Professor Kimberley Grant, College of St Elizabeth, 8/1 - 8/5/94, **Ar NF_3**
Professor Jim LoBue, Georgia Southern University, 8/8 - 8/12/94, **CO_2 C_6H_6**
Professor Robert Bohn, University of Connecticut, 8/18 - 8/19/94, **3-hexyn-2-one, $CH_3CH_2C{\equiv}C(CO)CH_3$**
Professor Wallace Pringle and David McCamant, Wesleyan University, 8/29 - 9/2/94, **Ar $(CH_2)_3$** (Argon cyclopropane)
Professor Wallace Pringle and David McCamant, Wesleyan University, 9/19 - 9/23/94, **Ar $(CH_2)_3S$** (Argon trimethylene sulfide)
Dr. Mike McCarthy and Dr. Michael Travers, Center for Astrophysics, Harvard Smithsonian, 12/1 - 12/2/94, ^{13}C substituted · **C≡C-C≡C-H** radical
Professor Wallace Pringle and David McCamant, Wesleyan University, 1/13/95, **Ar $(CH_2)_3S$**
Professor Wallace Pringle and Ranjith Premasiri, Wesleyan University, 1/14 - 1/15/95, **Ar $(CH_2)_3O$** (Argon trimethylene oxide)
Professor Robert Bohn, University of Connecticut, 1/16 - 1/20/95, **methyl ethyl formamide**, **$CH_3(NCHO)CH_2CH_3$**
Professor Wallace Pringle, David McCamant, Ranjith Premasiri, Wesleyan University, 2/13 - 2/24/95, **Ar $(CH_2)_3S$** and **Ar $(CH_2)_3O$**
{At this point, Professor Pringle and his students, who are just down the hall from the SNEMC lab, become such frequent spectrometer users that individual visits and projects are no longer noted on this list}
Professor Robert Bohn, University of Connecticut, 3/20 - 3/21/95, **methyl ethyl formamide**, **$CH_3(NCHO)CH_2CH_3$**
Dr. Michael Travers, Harvard Smithsonian Center for Astrophysics, 4/27 - 4/28/95, ^{13}C isotopomers of **$:C=C=C=CH_2$**
Dr. Mike McCarthy, Harvard Smithsonian Center for Astrophysics, 5/4/95, measurement of the Zeeman effect in · **C≡C-C≡C-H**
Professor Robert Bohn, University of Connecticut, 5/16 - 5/17/95, **methyl ethyl formamide**, **$CH_3(NCHO)CH_2CH_3$**
Professor Karen Peterson, San Diego State University, 6/21 - 6/23/95, **NO H_2O**
Dr. Michael Travers, Harvard Smithsonian Center for Astrophysics, 7/6/95, **$:C=C=C=CD_2$**

Professor Kimberley Grant, College of St Elizabeth, 7/10 - 7/14/95, **Ar NF_3**
Dr. Michael Travers, Dr. Mike McCarthy, Peter Kalmus, Harvard Smithsonian Center for Astrophysics, 8/8/95 **H-C_3-C≡C-C≡C-H**
Dr. Michael Travers, Harvard Smithsonian Center for Astrophysics, 8/22 - 8/23/95 deuteration of **C_7H_2**
Professor Jim LoBue, Georgia Southern University, 8/28 - 9/1/95, **Ar $(CH_3)_2S$**
Dr. Jens-Uwe Grabow, Kiel University and National Institute of Standards and Technology, 10/2/95 - 10/8/95, Install and set up automation software and equipment for the spectrometer.
Dr. Michael Travers, Harvard Smithsonian Center for Astrophysics, 11/1/95 test of K rotational temperature in the discharge using **CF_3C≡C-H**
Dr. Michael Travers, Dr. Mike McCarthy, Harvard Smithsonian Center for Astrophysics, 3/4/96 (tentative), scans for **$HC_{11}N$**
Professor Jim LoBue and student, Georgia Southern University, 3/19 - 3/22/96, **Ar $(CH_3)_2S$**
Professor Penny Snetsinger, Sacred Heart University, 7/8 - 7/24/96, **HCl H-C≡C-C≡C-H**
Professor Robert Bohn, University of Connecticut, 7/29 - 8/2/96, multiple conformations of **butyl cyanide**[*] and **n-propyl benzaldehyde**, internal rotation in **3-hexyn-2-one** and **hexadienal**
Dr. Mark Nimlos, National Renewable Energy Laboratory, Golden, Colorado, 10/7 -10/8/96, phenyl radical, **C_6H_5**
Professor Robert Bohn and student, University of Connecticut, 12/17 -12/19/96, **methyl propyl formamide**, $(CH_3)(C_3H_7)NCHO$.
Dr. Wei Chen, Harvard Smithsonian Center for Astrophysics, 12/23, 12/27, 12/30-31/96, **$H_2C_4{}^{14}N$** deep scans from methyl cyano acetylene precursor.
Professor Robert Bohn, University of Connecticut, 1/6 - 1/10/97, **n-propyl benzaldehyde**, $CH_3CH_2CH_2(C_6H_4)CHO$, and internal rotation in **t-butyl benzene**, $C_6H_5C(CH_3)_3$
Dr. Wei Chen, Harvard Smithsonian Center for Astrophysics, 1/11 - 1/13/97, search for **H_2C_5O**.
Dr. Rick Suenram, National Institute of Standards and Technology, 1/31/97, visit to observe our production methods of radicals using the pulsed high voltage source, test on **Ar OH**.
Professor Robert Bohn and David Sedich, University of Connecticut, 3/17 - 3/21/97, **4-t-butyl pyridine**, $(CH_3)_3C\text{-}C_5H_4N$, and **2-pentynal**, $CHOCCCH_2CH_3$.
Dr. Wei Chen, Harvard Smithsonian Center for Astrophysics, 4/29 - 5/2/97, searches for **H_2C_6N** using methyl cyano acetylene as a precursor.
Professor Robert Bohn, University of Connecticut, 5/19 - 5/25/97, **3-phenyl-2-propynal**, C_6H_5CCCHO, and **N,N-diethyl formamide**, $(C_2H_5)_2NCHO$
Professor Karen Peterson, San Diego State University, 8/2 - 8/6/97, **H_2O $(NO)_2$**
Dr. Wei Chen, Harvard Smithsonian Center for Astrophysics, 8/11 - 8/12/97, **sensitivity measurements**
Professor Jim LoBue, Georgia Southern University, 8/13 - 8/15/97, **Ar $(CH_3)_2S$**
Dr. Wei Chen[*], Harvard Smithsonian Center for Astrophysics, 9/8 - 9/12/97, searches for **H_2C_6N** and **H_2C_5H**
Dr. Wei Chen[*], Harvard Smithsonian Center for Astrophysics, 10/6 - 10/10/97, searches for **H_2C_5H**,**H_2C-C≡ C-C≡ C-H**, 2,4-pentadiynyl
Dr. Angela Hight Walker[**], National Institute of Standards and Technology, 10/20 - 10/24/97, visit for the purposes of working on fitting the spectrum of O_2 SO_2 using the "Pickett" programs for this inverting spin triplet complex
Professor Robert Bohn, University of Connecticut, 1/5 - 1/11/98, **methyl-ethyl-formamide**, $CH_3(NCHO)C_2H_5$; **ethyl pentafluoro propionate**, $CH_3CH_2O(CO)CF_2CF_3$; **ethyl heptafluoro butyrate**, $CH_3CH_2O(CO)CF_2CF_2CF_3$
Dr. Wei Chen[*], Harvard Smithsonian Center for Astrophysics, 1/12 - 1/15, 1/26 - 1/30/98 searches for **H_2C_5H**,**H_2C-C≡ C-C≡ C-H**, 2,4-pentadiynyl
Professor Jim LoBue, and an undergraduate student of his, James Thorton,

Georgia Southern University, 3/24 - 3/30/98, **Ar $(CH_3)_2{}^{34}S$**

Dr. Wei Chen*, Harvard Smithsonian Center for Astrophysics, 4/27 - 4/30/98, searches for **H_2C_7H**, **H_2C-C≡C-C≡C-C≡C-H**

Professor Robert Bohn and Colleen Coulter (grad student), University of Connecticut, 5/11 5/11 - 5/15/98, **methyl thiolformate**, $CHOSCH_3$, **diethyl formamide**, $C_2H_5(NCHO)C_2H_5$, and **2-pentynal**, $CHOCCCH_2CH_3$.

Professor Robert Bohn, Colleen Coulter[1], Dorothy Bancroft[2], University of Connecticut, 6/4 - 6/5/98, **2-pentynal**, $CHOCCCH_2CH_3$.

Dr. Jens-Uwe Grabow, Kiel University, 6/24/98, upgrade spectrometer.

Professor Robert Bohn, Colleen Coulter, University of Connecticut, 8/24 - 8/28/98, **2-pentynal**, $CHOCCCH_2CH_3$, and **methyl thiolformate**, $CHOSCH_3$

Professor Robert Bohn, Colleen Coulter, University of Connecticut, 11/24/98, **methyl thiolformate**, $CHOSCH_3$

Professor Robert Bohn, Colleen Coulter, University of Connecticut, 1/7 - 1/8/99, **methyl thiolformate**, $CHOSCH_3$

Professor Robert Bohn, Karissa Atticks[1], Colleen Coulter, University of Connecticut, 2/11 - 2/13/99, **butylacetylene**, $CH_3CH_2CH_2CH_2C \equiv CH$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 5/11 - 5/13/99, four conformations of **butylacetylene**, $CH_3CH_2CH_2CH_2C \equiv CH$

Professor Robert Bohn, Colleen Coulter[1], University of Connecticut, 1/18 - 1/20/99, **cyclopropyl benzene**, c-$C_3H_5C_6H_5$

Professor Jim LoBue, Georgia Southern University, 6/28 - 7/3/99, **Ar $(CH_3)_2S$**

Professor Robert Bohn, Amanda Willis[2], Karissa Atticks[1], Colleen Coulter[1], University of Connecticut, 7/12 - 7/16/99, **cyclopropyl benzene**, c-$C_3H_5C_6H_5$, **butylacetylene**, $CH_3CH_2CH_2CH_2C \equiv CH$, and **allyl benzene**, $CH_2CHCH_2C_6H_5$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 8/17 - 8/19/99, isotopomers of conformers of **butylacetylene**, $CH_3CH_2CH_2CH_2C \equiv CH$, (1-hexyne).

Professor Robert Bohn, Amanda Willis[2], University of Connecticut, 9/2 - 9/3/99, **cyclopropyl benzene**, c-$C_3H_5C_6H_5$, **1,2-difluorocyclohexane**, c-$C_6H_{10}F_2$

Professor Robert Bohn, Karissa Atticks[1], Lauren Nedell[2], University of Connecticut, 1/3 - 1//00, isotopomers of conformers of **butylacetylene**, $CH_3CH_2CH_2CH_2C \equiv CH$; **ortho-phthalaldehyde**, $C_6H_4(CHO)_2$

Professor Robert Bohn, University of Connecticut; Stacy Broadbent[2], Holy Cross, 6/22 - 6/23/00, **vinyl chloroformate**, $ClCOOCHCH_2$

Professor Jim LoBue, Georgia Southern University, 7/17 - 7/21/00, **Ar $(CD_3)_2S$**

Karissa Atticks[1], University of Connecticut; Stacy Broadbent[2], Holy Cross, 7/24 - 7/26/00, **vinyl chloroformate**, $ClCOOCHCH_2$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 8/14/00, isotopomers of conformers of **butylacetylene**, (1-hexyne), $CH_3CH_2CH_2CH_2C \equiv CH$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 10/27/00, isotopomers of conformers of **butylacetylene**, (1-hexyne), $CH_3CH_2CH_2CH_2C \equiv CH$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 11/17 - 11/20/00, ^{13}C isotopomers of **vinyl chloroformate**, $ClCOOCHCH_2$

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 12/19 - 12/20/00 **allyl nitrite**, O=N-O-CH_2-CH=CH_2

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 1/11 - 1/12/01 conformers of **1,2-difluorocyclohexane**, c-$C_6H_{10}F_2$; **phenyl propargaldehyde**, C_6H_5CCCHO

Professor Robert Bohn, Karissa Atticks[1], Elizabeth Trosell[2], University of Connecticut, 1/18 - 1/19/01, $C_6H_5CCCH_2CH_3$, **1-phenyl-1-butyne**

Professor Robert Bohn, Elizabeth Trosell[2], University of Connecticut, 3/15 - 3/19/01 ax-ax conformer of **trans-1,2-difluorocyclohexane**; $C_6H_5CH_2CCH$, **propargylbenzene**

Professor Robert Bohn, Joanna Riccobono[2a], Karissa Atticks[1], University of Connecticut, 5/31 -

6/02/01, **phenyl isopropyl acetylene**, C_6H_5-C ≡ C-CH$(CH_3)_2$; **propanol**, $CH_3CH_2CH_2OH$; **hex-1-nitrile-5-yne**, HC ≡ $CCH_2CH_2CH_2C$ ≡ N

Dr. Mark Nimlos, National Renewable Energy Laboratory (NREL), Golden, Colorado, 6/4 - 6/8/01, **phenyl radical**, C_6H_5. Dr. Nimlos is bringing his well-engineered flash-pyrolysis (Chen) nozzle, along with his expertise in quantitative production of the phenyl radical.

Dr. Jens-Uwe Grabow, University of Hannover, 6/25 - 6/27/01, upgrade computer-spectrometer interface.

Karissa Atticks[1], Joanna Riccobono[2a], University of Connecticut, 7/10 - 7/12/01, **hex-1-nitrile-5-yne**, HC ≡ $CCH_2CH_2CH_2C$ ≡ N, **1-propanol**, $CH_3CH_2CH_2OH$

Dr. Jens-Uwe Grabow, University of Hannover, 7/24 - 8/2/01, upgrade computer-spectrometer interface.

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 9/27-9/29/01, various conformers of **hex-1-nitrile-5-yne**, HC ≡ $CCH_2CH_2CH_2C$ ≡ N

Professor Robert Bohn, John Bimler[2], University of Connecticut, 11/1 - 11/2/01 ax-ax conformer of **1,2-difluorocyclohexane**; c-$C_6H_{10}F_2$; isotopes of **vinyl chloroformate**, $ClCOOCHCH_2$.

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 1/10 - 1/12/02, **phenyl isopropyl acetylene**, C_6H_5-C ≡ C-CH$(CH_3)_2$, searching for the antisymmetric internal rotation state of this 2-fold rotor; **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Professor Robert Bohn, Jon Bimler[2], Karissa Atticks[1], University of Connecticut, 2/8 -2/10/02, isotopomers of **vinyl chloroformate**, $ClCOOCHCH_2$; **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Dr. Michaeleen Munrow, Robin Dejesus[3], Norwalk High School, 2/18 - 2/19/02, **2R-** and **2S-heptane-2-ol**, $CH_3CHOH(CH_2)_4CH_3$

Professor Robert Bohn, Karissa Atticks[1], Emily Chu[2], University of Connecticut, 3/19 - 3/21/02, **phenyl isopropyl acetylene**, C_6H_5-C ≡ C-CH$(CH_3)_2$; ax-ax and eq-eq conformers of **trans-1,2-difluorocyclohexane**, c-$C_6H_{10}F_2$; **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Dr. Mark Nimlos, National Renewable Energy Laboratory (NREL), Golden, Colorado, 4/12 - 4/19/02, **allyl, phenoxy, and propargyl radicals,** and non-radical pyrolysis products such as **acetic acid** from ethyl acetate. Adventures with flash-pyrolysis.

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 5/22 - 5/22/02, **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Professor Robert Bohn, Karissa Atticks[1], Russell Giudici[2b],University of Connecticut, 6/6 - 6/7/02, **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Dr. Jens-Uwe Grabow, Deike Banser[1], Melanie Schnell[1], University of Hannover, 6/24 - 6/25/02, upgrade computer-spectrometer interface.

Karissa Atticks[1], Russell Giudici[2b],University of Connecticut, 7/11- 7/12/02, **3-phenyl-1-propyne**, (propargylbenzene), c-$C_6H_5CH_2C{\equiv}CH$; **hex-1-nitrile-5-yne**, HC ≡ $CCH_2CH_2CH_2C$ ≡ N

Professor Robert Bohn, Karissa Atticks[1], Russell Giudici[2b],University of Connecticut, 7/31 - 8/1/02, isotopomers of **3-phenyl-1-propyne**, (propargylbenzene), c-$C_6H_5CH_2C{\equiv}CH$; **benzyl alcohol**, c-$C_6H_5CH_2OH$.

Dr. Mark Nimlos, National Renewable Energy Laboratory (NREL), Golden, Colorado, 8/2 - 8/5/02, further studies with the flash-pyrolysis nozzle, **propargyl radical** $H_2CC{\equiv}H$, from propargyl bromide.

Professor Robert Bohn, Karissa Atticks[1], Russell Giudici[2b],University of Connecticut, 10/10 - 10/12/02, **propanol**; **phenethanol**, (phenyl hydroxy methyl methane).

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 12/18 -12/19/02, **deuterated benzyl alcohol**, c-$C_6H_5CH_2OD$.

Professor Robert Bohn, Geoff Churchill[1], Karissa Atticks[1], University of Connecticut, 1/14 - 1/17/03, **sec-phenethanol**, C_6H_5−CH(OH)(CH_3); **deuterated benzyl alcohol**, c-$C_6H_5CH_2OD$.

Professor Robert Bohn, Karissa Atticks[1], Eric Shananahan[2], University of Connecticut,

2/27 - 2/28/03, **benzyl alcohol**, c-$C_6H_5CH_2OD$.

Professor Robert Bohn, Karissa Atticks[1], Geoff Churchill[1], Elizabeth Trosell[2],University of Connecticut, 3/17 -3/19/03, **benzyl alcohol**, c-$C_6H_5CH_2OH$; **3-phenyl-1-propyne**, (propargylbenzene), c-$C_6H_5CH_2C{\equiv}CH$

Karissa Atticks[1], University of Connecticut, 5/8 - 5/9/03, **1-hexyne**

Professor Robert Bohn, Karissa Atticks[1], University of Connecticut, 5/14 - 5/16/03 **isobutylbenzene**

Dr. Mark Nimlos, National Renewable Energy Laboratory (NREL), Golden, Colorado, 6/3 - 6/4/03, further studies with the flash-pyrolysis nozzle, attempts to lower the rotational temperature

Professor Robert Bohn, Geoff Churchill[1], Karissa Atticks[1], Ruthanne Hassey[2c], University of Connecticut, 6/12 - 6/17/03, **3-hexyne**

Professor Robert Bohn, Geoff Churchill[1], Ruthanne Hassey[2c], University of Connecticut, 7/09 - 7/10/03, 7/22/03, **isobutylbenzene** and **3-hexyne**

Professor Robert Bohn, Eric Shanahan[2], Geoff Churchill[1], Karissa Atticks[1], University of Connecticut, 11/06 - 11/08/03, **isobutylbenzene**, $C_6H_5CH(CH_3)_2$, **5-hexynenitrile**, $N{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$

Professor Robert Bohn, University of Connecticut, 1/05 - 1/08/04, **propargyl benzene**, $C_6H_5CH_2C{\equiv}CH$

Professor Robert Bohn, University of Connecticut, 4/19 - 4/22/04, **4-octyne**, di-n-propyl acetylene

Professor Robert Bohn, University of Connecticut, 5/11 - 5/12/04, **4-octyne**, di-n-propyl acetylene

Dr. Amy Stevens Miller, ChemMotif, Concord, MA, 6/04/04, beginning of a collaboration on **$HCo(PF_3)_4$**, delivering and transferring the samples

Professor Jens-Uwe Grabow, University of Hannover, 6/09/04 - 6/10/04, upgrade computer-spectrometer interface.

Professor Robert Bohn, University of Connecticut, 6/30 - 7/01/04, **propargyl benzene**, $C_6H_5CH_2C{\equiv}CH$, partially deuterated; **4-octyne**, di-n-propyl acetylene; **isobutylbenzene**

Professor Karen Peterson, San Diego State University, 7/7 - 7/9/04, **argon propane**

Professor Robert Bohn, Albeiro Restrepo[1], University of Connecticut, 10/28 - 10/30/04, **5-hexynenitrile**, $N{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$; **heptadiyne**, $HC{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$

Dr. Thomas Blake, Pacific Northwest National Laboratory, 11/15 - 11/19/04, **tropolone**, c-C_7H_5OOH, **Ar tropolone, water tropolone**

Professor Robert Bohn, Albeiro Restrepo[1], Geoff Churchill[1], University of Connecticut, 1/05 - 1/08/05, **1,6-heptadiyne**, $HC{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$; **2-methyl-3-hexyne**, isopropylethylacetylene, $(CH_3)_2CH{-}C{\equiv}C{-}CH_2CH_3$

Geoff Churchill[1], University of Connecticut, 2/7/05, **2-methyl-3-hexyne**

Geoff Churchill[1], University of Connecticut, 2/28/05, **2-methyl-3-hexyne**

Professor Robert Bohn, Albeiro Restrepo[1], Geoff Churchill[1], Lu Ma[2], University of Connecticut, 3/07 - 3/11/05, **1,6-heptadiyne**, $HC{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$; **2-methyl-3-hexyne**, isopropylethylacetylene, $(CH_3)_2CH{-}C{\equiv}C{-}CH_2CH_3$; **2-methylbutane**, isopentane, $(CH_3)_2CHCH_2CH_3$

Geoff Churchill[1], Kristin Swana[2,] University of Connecticut, 4/4/05, **isopentane**

Professor Robert Bohn, Geoff Churchill[1], Kristin Swana[2], University of Connecticut, 4/18/05, **isopentane**

Professor Robert Bohn, Albeiro Restrepo[1], 5/9 - 5/11/05, **allylbenzene**, $C_6H_5CH_2{-}C{\equiv}CH$,

Professor Robert Bohn, Geoff Churchill[1], University of Connecticut, 4/18/05, **isopentane**

Professor Lu Kang, Union College, Barbourville, KY., 6/18 - 6/26/05, $H_2P{-}C{\equiv}C{-}CN$

Professor Karen Peterson, San Diego State University, 6/27 - 7/1/05, **argon propane**, **neon propane**, Ne $CH_3CH_2CH_3$

Professor Robert Bohn, Geoff Churchill[1], Becky Milot[2d], University of Connecticut, 7/21-7/23/05, **4-methyl-1-pentyne**, $HC{\equiv}C{-}CH_2{-}CH(CH_3)_2$

Geoff Churchill[1], University of Connecticut, 8/15 - 8/19/2005, conformations of **2-methyl-3-hexyne**, $(CH_3)_2CH{-}C{\equiv}C{-}CH_2CH_3$, isopropylethylacetylene, **isopentane**

Geoff Churchill[1], University of Connecticut, 10/11 - 10/13/2005, conformations of **2-methyl-3-hexyne**, $(CH_3)_2CH{-}C{\equiv}C{-}CH_2CH_3$, isopropylethylacetylene

Professor Robert Bohn, Tanya Povroznyk[2], University of Connecticut, 10/13 - 10/15/2005, **3-heptyne**, $CH_3CH_2{-}C{\equiv}C{-}CH_2CH_2CH_3$

Professor Robert Bohn, Geoff Churchill[1], University of Connecticut, 11/8 - 11/12/05, **2-methyl-3-hexyne**, and **3-heptyne**

Geoff Churchill[1], University of Connecticut, 11/28/05, 12/7 -12/8/05, **3-heptyne**, and **n-pentane**

Professor Lu Kang, Union College, Barbourville, KY., 12/12/05 - 1/8/06, $H_2P{-}C{\equiv}C{-}C{\equiv}N$, **phosphaacetylnitrile**; $C_6H_5OCF_3$, **trifluoroanisol**; CF_3OOCF_3, **bis(trifluoromethyl)peroxide**; CF_3OO, **trifluoromethylperoxy radical**

Professor Robert Bohn, Geoff Churchill[1], University of Connecticut, 1/9 - 1/11/06, **3-heptyne**, **pentane**, **isopentane**

Visiting Professor Jennifer Van Wijngaarden, Mount Holyoke College, 1/12 - 1/20/06, various projects, **argon cyclopenteneoxide**

Professor Robert Bohn, Christian Acharte[2], Geoff Churchill[1], University of Connecticut, 2/13 - 2/14, $CF_3CO_2C_2H_5$, **ethyl trifluoroacetate**

Professor Jennifer Van Wijngaarden, Mount Holyoke College, 2/14, **argon cyclopenteneoxide**

Professor Jennifer Van Wijngaarden, Mount Holyoke College, 2/19 & 2/21/06, CF_3O, **trifluoromethoxy radical**

Professor Jennifer Van Wijngaarden, Mount Holyoke College, 3/7, 3/14, 3/19-23, 3/28, 4/10, 4/11/06, **HPCN** radical

Professor Robert Bohn, Christian Acharte[2], University of Connecticut, 4/12/06 $CF_3CO_2C_2H_5$, **ethyl trifluoroacetate**, new conformation in He expansion

Professor Jennifer Van Wijngaarden, Mount Holyoke College, 4/25, 4/30 - 5/2/06, **HPCN** radical

Professor Robert Bohn, University of Connecticut, 5/9 - 5/11/06, **3-heptyne**, $CH_3CH_2{-}C{\equiv}C{-}CH_2CH_2CH_3$, new conformation in He expansion; **2-methyl-1-hexene-3-yne**, ethylpropenylacetylene, $CH_3CH_2{-}C{\equiv}C{-}C(CH_2)CH_3$

Professor Robert Bohn, University of Connecticut, 5/30 - 5/31/06, second conformer of **3-hexyne**; **1-phenyl-1-ethanol**, $C_6H_5CH(OH)CH_3$

Professor Jennifer Van Wijngaarden, Mount Holyoke College, 6/12 - 6/14/06, **HPCN** radical

Professor Robert Bohn, Joe Yeager[2e], University of Connecticut, 6/15/06, **2-methyl-1-hexene-3-yne**, ethylpropenylacetylene, $CH_3CH_2{-}C{\equiv}C{-}C(CH_2)CH_3$

Professor Karen Peterson, San Diego State University, 6/26 - 6/30/06, **neon propane**, Ne $CH_3CH_2CH_3$

Professor Lu Kang, Union College, Barbourville, KY., 7/3 - 8/18/06, various projects: $CF_3OC_6H_5$, Ar O_3, Ne HCCCN, CO HCCCN, CO_2 HCCCN

Professor Robert Bohn, Joe Yeager[2e], University of Connecticut, 7/12/06, **2-methyl-1-hexene-3-yne**, ethylpropenylacetylene, $CH_3CH_2{-}C{\equiv}C{-}C(CH_2)CH_3$

Professor Karen Peterson, San Diego State University, 7/26 - 7/27/06, **neon propane**, Ne $CH_3CH_2CH_3$

Professor Robert Bohn, Christian Acharte[2], William Whalen[2], University of Connecticut, 10/26 - 10/27/06, **2,5-dimethyl-3-hexyne**, diisopropyl aceteylene, $(CH_3CHCH_3){-}C{\equiv}C{-}(CH_3CHCH_3)$

Professor Robert Bohn, William Whalen[2], University of Connecticut, 11/20 - 11/21/06, **2,5-dimethyl-3-hexyne**, diisopropyl aceteylene

Professor Lu Kang, Union College, Barbourville, KY., 12/11/06 - 1/6/07, **HCCCN CO_2**, **HCCCN CO**, **neon cyclopentene oxide**

Professor Robert Bohn, University of Connecticut, 1/4 - 1/5/07,

5-hexynenitrile, $N{\equiv}C{-}CH_2{-}CH_2{-}CH_2{-}C{\equiv}CH$,
4,4-dimethyl-2-pentyne, methyl t-butyl acetylene, $CH_3{-}C{\equiv}C{-}C(CH_3)_3$

Professor Robert Bohn, University of Connecticut, 1/11/07,
4,4-dimethyl-2-pentyne, methyl t-butyl acetylene, $CH_3{-}C{\equiv}C{-}C(CH_3)_3$
trimethylsilyl t-butyl acetylene, $(CH_3)_3Si{-}C{\equiv}C{-}C(CH_3)_3$

Professor Robert Bohn, Joseph Fournier[2],University of Connecticut, 3/7 - 3/9/07,
6-methyl-3-heptyne, $CH_3CH_2{-}C{\equiv}C{-}CH_2CH(CH_3)_2$, ethyl isobutyl acetylene

Professor Geoff Churchill, Manchester Community College, CT, videotaping how spectroscopy is performed on the FTMW spectrometer, 3/8/07

Professor Lu Kang, Union College, Barbourville, KY., 4/26/07 - 5/3/07, **Ne O_3**, isotopomers of **CO HCCCN**

Professor Robert Bohn, Joseph Fournier[2],University of Connecticut, 5/17 - 18, 5/21 - 5/22/07,
4-octyne, $CH_3{-}CH_2{-}CH_2{-}C{\equiv}C{-}CH_2{-}CH_2{-}CH_3$,
6 -methyl-3-heptyne, ethyl isobutyl acetylene, $CH_3CH_2{-}C{\equiv}C{-}CH_2CH(CH_3)_2$;
isobutylbenzene

Professor Jens-Uwe Grabow, University of Hannover, 6/28 - 6/29/07,
consult on the status of the FTMW spectrometer.

Fumie Sunahori,[1a] University of Kentucky, 7/2 - 7/18/07, **CCP** radical, **HGeBr**

Professor Karen Peterson, San Diego State University, 7/22 - 7/25/07,
methane propane, CH_4 $CH_3CH_2CH_3$

Professor Robert Bohn, Joseph Fournier[2],University of Connecticut, 8/20 - 8/21/07,
2-methyl pentane, $(CH_3)_2CHCH_2CH_2CH_3$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 11/19 - 11/20/07,
2-methyl pentane

Professor Wei Lin, University of Saint Mary, Leavenworth, KS, 12/13 - 12/18/07,
Ne methylenecyclobutane, H_2O CF_3CN, Ne CF_3CN

Professor Lu Kang, Union College, Barbourville, KY., 12/15/07 - 1/04/08,
DSiCl, **HGeBr**, **DGeBr**

Professor Robert Bohn, James Dombrowski[2], Joseph Fournier[2], Greg Salber[2],
University of Connecticut, 1/07 - 1/08/08, **isobutylbenzene**, **hexane**

Professor Robert Bohn, James Dombrowski[2], University of Connecticut, 3/11 - 3/12/08,
hexane, **ethyl trifluoroacetate**

Professor Stephen Cooke, University of North Texas, visit planned for 4/29 - 5/2/08, to study our methods of producing radicals with a discharge nozzle and methods of scanning the spectra

Professor Lu Kang, Union College, Barbourville, KY., 5/16 - ~8/15/08, various projects including **HGeBr**

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 5/27 - 5/28, 6/9 - 6/10/08
hexane; **perfluoropentane**; **ethyl-2-pentynoate**, $CH_3CH_2C{\equiv}CCOOCH_2CH_3$

Professor Karen Peterson, San Diego State University, 6/23 - 6/27/08,
methane propane, CH_4 $CH_3CH_2CH_3$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 5/27 - 5/28, 6/9 - 6/10/08
hexane; **perfluoropentane**; **ethyl-2-pentynoate**, $CH_3CH_2C{\equiv}CCOOCH_2CH_3$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 10/2 - 10/4/08
perfluoropentane

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 11/6 - 11/7/08
^{13}C isotopomers of **perfluoropentane**

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 11/20 - 11/21/08
^{13}C isotopomers of **perfluoropentane**; **3,5-octadiyne** (diethyldiacteylene)

Professor Lu Kang, Union College, Barbourville, KY., 12/18/08 - 1/9/09, **DSiI**,
OC H{-}C{≡}C{-}C{≡}N

Professor Robert Bohn, Joseph Fournier[2], James Dombrowski[2], University of Connecticut,
1/12 - 1/13/09, ^{13}C isotopomers of **perfluoropentane**, conformers of **isopentane**

Professor Robert Bohn, James Dombrowski[2], Tin Phan[2], University of Connecticut, 2/5 - 2/6/09, **perfluorohexane**, **2-methylbutane**

Professor Robert Bohn, University of Connecticut, 3/5 -3/6/09, **3,5-octadiyne**, $CH_3CH_2-C\equiv C-C\equiv C-CH_2CH_3$

Professor Wei Lin, University of Saint Mary, Leavenworth, KS, 3/8 - 3/14/09, **3-pyrroline**, c-$NHCH_2CH{=}CHCH_2$, C_4H_7N

Professor Karen Peterson, San Diego State University, 3/31 - 4/5/09, **methane propane**, CH_4 $CH_3CH_2CH_3$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 6/8 - 6/10/09, **octadiyne**; **perfluoroheptane**, C_7F_{16}; 1-H-perfluoropropane, $\mathbf{CHF_2CF_2CF_3}$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 7/28 - 7/30/09, **octadiyne**; 1-H-perfluoropropane, $\mathbf{CHF_2CF_2CF_3}$

Professor Robert Bohn, James Dombrowski[2], University of Connecticut, 9/25 - 9/26/09, ^{13}C isotopologues of **sec-phenethanol**, $C_6H_5CH(OH)(CH_3)$

Professor Robert Bohn, James Dombrowski[2], Contin Phan[2], University of Connecticut, 11/23 - 11/24/09, **5-hexyne nitrile**, $HCC(CH_2)_3CN$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 12/21 -12/22/09, **3,5-octadiyne**

Professor Robert Bohn, James Dombrowski[2], University of Connecticut, 1/06 - 1/07/10, **secondary phenyl ethanol**,$CH_3CH(C_6H_5)OH$; 1-H-perfluorobutane, $\mathbf{HCF_2CF_2CF_2CF_3}$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 1/14/10, **3,5-octadiyne**; **1-H-perfluorobutane**

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 2/25 - 2/26/10, **3,5-octadiyne**

Professor Robert Bohn, University of Connecticut, 4/8 - 4/9/10, **sec-phenethanol**, $C_6H_5CHOHCH_3$

Professor Robert Bohn, Joseph Fournier[2], University of Connecticut, 5/19 - 5/20/10, **3,5-octadiyne**

Professor Robert Bohn, University of Connecticut, 7/27 - 7/28/10, **benzylmethylether**, $C_6H_5CH_2OCH_3$; **pentafluoroaniline**, $C_6F_5NH_2$

Professor Karen Peterson, San Diego State University, 9/22 - 10/02/10 **methane propane**, CH_4 $CH_3CH_2CH_3$

Professor Wei Lin, University of Texas, Brownville, TX, 12/8 - 12/15/10, $(CH_3CHClF)_2$

Professor Andrea Minei, Joy Cote,[2] Kyle Firmender,[2] College of Mount Saint Vincent, 4/19/11 visit to introduce students to the laboratory in preparation for future experiments

Professor Robert Bohn, University of Connecticut, Lecturer Geoff Churchill, Curry College, 5/12 - 5/13/11, **3,5-octadiyne**; C_6F_5OH, **pentafluorophenol**

Starting in August 2011, **Professor Stephen Cooke**[***], of the State University of New York at Purchase, is housing two of his spectrometers, a Chirp/Cavity and a Cavity FTMW spectrometer in our laboratory at Wesleyan. Professor Cooke will be visiting the laboratory ever other week for the next few years.

Professor Robert Bohn, University of Connecticut, Dr. Geoff Churchill, Norwell, MA, School District, 8/25 - 8/26/11, **1-H-nonafluorobutane**, $HCF_2CF_2CF_2CF_3$

Professor Wei Lin, University of Texas, Brownville, TX, 12/8 - 12/12/11, $\mathbf{CF_3CF_2COOH}$, pentafluoropropionic acid; $\mathbf{H_2O\ CF_3CF_2COOH}$; **thioxanthone**, C_9H_8OS; all data taken on the Chirp Spectrometer.

Professor Andrea Minei, College of Mount Saint Vincent, 12/22 - 12/23/11, **perfluorodecanonitrile**, $CF_3(CF_2)_8CN$

Frank DeChirico[2], SUNY Purchase, 3/5/12, Frank accompanied his research advisor, Professor **Stephen Cooke**[***], to work on **propyl methyl ether** on the Chirp Spectrometer

Nadeen Alkhawam[2], SUNY Purchase, 5/12, accompanied her research advisor, Professor Stephen Cooke[***] to work on **phenylchloride**

Professor Wei Lin, University of Texas, Brownville, TX, 5/24 -5/30/12, **pentafluoropropionic**

acid, **2,2,3,3-tetrafluoropropionic acid**, **2,3,3,3-tetrafluoropropionic acid**, **H_2O 2,3,3,3-tetrafluoropropionic acid,** singly deuterated **pentafluropropionic acid** in natural abundance. Some spectra taken on the Chirp Spectrometer, some on the cavity spectrometer.

Professor Andrea Minei, College of Mount Saint Vincent, 8/08/12, spectra collected by Stephen Cooke, **trans-1-H,2-H-perfluorocyclobutane**, $C_4H_2F_6$, and **cis-1-H,2-H-perfluorocyclobutane**, $C_4H_2F_6$ (on the Chirp)

Professor Andrea Minei, College of Mount Saint Vincent, 8/14/12, spectra collected by Stephen Cooke, **1-H,2-H-perfluorocyclopentane**, $C_5H_2F_8$, **1-H,1-H,2-H-perfluorocyclopentane**, $C_5H_3F_7$ (on the Chirp)

Professor Andrea Minei, College of Mount Saint Vincent, 8/24/12, **1,1,2,2,3-pentafluorocyclobutane**, $C_4H_3F_5$ (on the Chirp)

Professor Andrea Minei, College of Mount Saint Vincent, 8/31/12, spectra collected by Stephen Cooke, **$(CF_3)_2C$=C(F)OCH3**, 1,1,1,3-tetrafluoro-2-(trifluoromethyl)-4-oxapent-2-ene, 1,1-trifluoromethyl-2-fluoro-2-methoxy ethylene (on the Chirp)

Alise Turk[2], SUNY Purchase, 2/13/13, accompanied her research advisor, Professor Stephen Cooke[***] has worked on assigning $CF_3OCHFCF_3$. This visit is to observe the spectrometers in action.

Jens-Uwe Grabow, Institut für Physikalische Chemie, Gottfried-Wilhelm-Leibniz Universität, Hannover, Germany, 6/24/13 - 7/2/13. This visit was for our benefit. Jens upgraded Steve Cooke's two spectrometers to allow automated scanning and helped SEN with the upgrade of his spectrometer to 40 GHz.

Alexandra (Lexi) Mikail[2], SUNY Purchase, 3/25/14, accompanied her research advisor, Professor Stephen Cooke[***], Observed the set-up for using the Chirp spectrometer for double resonance.

Yoon Choi[2], Weixin (Wei) Wu[2], SUNY Purchase, 5/23/14, accompanied their research advisor, Professor Stephen Cooke[***], for a visit to begin to learn how to run the spectrometers in preparation for their summer research projects.

Yoon Choi[2], Weixin (Wei) Wu[2], SUNY Purchase, 6/2/14 - 6/6/14, Wei worked on **1H,8H-perfluorooctane**, $C_8H_2F_{16}$, and Yoon worked on **perfluorocyclopentene**, C_5F_8. Both of these experiments were performed on the Chirp spectrometer.

Yoon Choi[2], Weixin (Wei) Wu[2], SUNY Purchase, 7/21/14 - 7/25/14, **perfluorocyclopentene**, C_5F_8, and **perfluorocyclohexene**, C_6F_{10}, experiments both on the Chirp and on the Cavity spectrometers.

Professor Wei Lin, University of Texas, Brownville, TX, 12/14 -12/20/14, **water propane**, H_2O $CH_3CH_2CH_3$, **pentafluoropropionic acid formic acid**, F_3CCF_2COOH HCOOH, **water 2,2,3,3-tetrafluoropropionic acid**, H_2O HF_2CCF_2COOH. Some spectra taken on the Chirp Spectrometer, some on the cavity spectrometer.

Juan Betancuv[2], SUNY Purchase, 2/06/15, **pentyl methyl ether**, $C_5H_{11}OCH_3$, on the Chirp

Aaron Schwartz[2], SUNY Purchase, 5/18 - 5/22/15, **1-hexyne**, $HC{\equiv}CCH_2CH_2CH_2CH_3$, **1-octyne**, $HC{\equiv}CCH_2CH_2CH_2CH_2CH_2CH_3$, on the Chirp

E. Arunan, IIT, Bangalor, India, 6/15 - 6/19/15. Professor Arunan visited my lab in order to learn about the Chirp Spectrometer, so as to be able to build one in his laboratory in Bangalor.

Jens-Uwe Grabow, Leibniz University, Hannover, Germany, 6/18 - 6/19/15. Jens visited my lab in order to help us fix a problem with our 40 GHz microwave circuit. Mission Accomplished.

Aaron Schwartz[2], SUNY Purchase, 8/03 - 8/07/15, **1H,1H-heptafluorobutanol**, $CF_3CF_2CF_2CH_2OH$; **1H,1H-nonafluoropentanol**, $CF_3CF_2CF_2CF_2CH_2OH$; **1H,1H-undecafluorohexanol**, $CF_3CF_2CF_2CF_2CF_2CH_2OH$, on the Chirp.

Professor Stephen Daunt, The University of Tennessee, 9/21/15, meeting to discuss our participation in the microwave spectroscopy of ^{13}C isotopomers of **propane**, to aid in his high resolution infrared spectroscopy, which in turn, is to support spectroscopic investigation of planetary atmospheres.

Dr. Thomas Blake, Pacific Northwest National Laboratory, 10/05 - 10/09/15, **water tropolone**, H_2O c-C_7H_5OOH, **methyl iodide**, **butyl iodide**

Elis Dervishi,[2] Jonathan Ogulnick,[2] Wilman Orellana,[2] Luiggi Rodrigez,[2] Kimberly Seegopaul,[2] Elizabeth Villegas,[2] SUNY Purchase, 10/20/15, $C_nH_{2n+1}F_n$, n = 5, 6, 7, 8, 9, 10

Luiggi Rodrigez,[2] SUNY Purchase, 12/31/15, to familiarize himself with and work on the Chirp spectrometer

Professor Lu Kang, Kennesaw State University, Marietta, GA., 4/06/16, analysis of CO_2 HCCCN spectra

Wilman Orellana,[2] SUNY Purchase, 5/17 -5/20/16, **methane propane**, ^{13}C isotopologues of **Ar cyanocyclobutane**, **2-bromopyridine**

Professor Karen Peterson, San Diego State University, 8/01 - 8/05/16 **methane propane**, CH_4 $CH_3CH_2CH_3$

Professor Wei Lin, University of Texas, Rio Grande Valley, 12/08 - 12/13/16, **4,4,4-trifluorobutyric acid**, $CF_3CH_2CH_2COOH$, and its complex with formic acid, **HCOOH**; **2,3,4,5,6-pentafluorobenzoic acid**, c-C_6F_5COOH, and its complex with **formic acid**.

Professor Andrea Minei, Lauren Tate,[2] College of Mount Saint Vincent, 1/12 - 1/13/17, **perfluorodecanonitrile**, $C_9F_{19}CN$

Dr. Daniel Obenchain, Institut für Physikalische Chemie und Elektrochemie, University of Hannover, Germany, 7/11 - 7/23/18, searching for ions, H_2CO^+

Professor Karen Peterson, San Diego State University, 7/24 - 7/27/18 **methane propane**, CH_4 $CH_3CH_2CH_3$

Professor Wei Lin, University of Texas, Rio Grande Valley, 12/10 - 12/18/18, **perfluoro hexanoic acid**, **perfluoroheptanoic acid**, **2-butynoic acid - formic acid complex**

***** From Sept. 1, 1997 through Aug. 31, 1998, Dr. Chen was half time with Professor Thaddeus and half time with S. Novick. Thus these visits do not, strictly, belong in the same category with those of "outside" visitors.

[**] This visit involved only theory, not use of machine time.

[1] Graduate Student

[1a] Graduate student of Dennis Clouthier, University of Kentucky

[2] Undergraduate Student

[2a]Summer RUI student from Salisbury State, Salisbury, MD.

[2b]Summer RUI student from College of the Holy Cross, Worcester, MA.

[2c]Summer RUI student from Houghton College, Houghton, NY.

[2d]Summer RUI student from Providence College, Providence RI.

[2e]Summer RUI student from Centre College, Danville KY.

[***] Professor **Stephen Cooke** moved from the University of North Texas to SUNY Purchase in the summer of 2011. Two of Steve's spectrometers, a cavity FTMW, and a Chirp FTMW now resided in my lab, where my students and I use and help maintain these spectrometers. However, they remain Professor Cooke's spectrometers. Thus when Steve comes alone to visit & use his own spectrometers, I do not include these visits (which occur about every other week) unless he brings a SUNY Purchase student with him or he is taking the spectra for other colleagues; these visits I will include in this diary.