

Accession No.: 2004-16

PROCESSING RECORD  
SCRIPPS INSTITUTION OF OCEANOGRAPHY ARCHIVES

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Craig, Harmon Bushnell 1926-2003

Harmon Bushnell Craig Papers, 1955-1987

Physical Description: 19 mss, 1 Lmss

Description: The accession consists of the papers of geochemist Harmon Craig. The accession includes correspondence, subject files, manuscripts, laboratory notebooks, data and other papers by Harmon Craig. The accession includes material documenting SMOW, GISP and other projects, oceanographic expeditions and field work, including research in Tibet, work on geothermal sites and ice cores and information on awards.

American geochemist and oceanographer; GEOSECS (1973-1974); Papatua Expedition (1960-1961); Zetes Expedition (1966);  
Geochemistry ; Oceanography; Scientific Expeditions

**Harmon Bushnell Craig**  
**Papers, 1955-1987**  
**Accession Number 2004-16**

<b>Box</b>	<b>Folder Title</b>
1	Cambridge, June 1986  Carbon Isotopes, Microfilms, Prior Papers  Smow, STD 1  Standard Mean Ocean Water [February 1967 - September 1995]  Harmon Craig Publication List [n.d.]  Harmon Craig Form Records [October 1991 – August 1996]  Harmon Craig Iselin Lectures, May 1985  Geological Society of America – Day Medal, 1983  A.L. Day Prize and Lectureship. Nat. Acad., 1987  H. Craig-Vetlesen Prize, November 1987  France Honoris Causas [September 1983 – June 1987]  Geochemical Society Meeting, 1979 Goldschmidt Medal  Goldschmidt Medal Accept. Speech [February 1980]  HC Community Service – Outside Lectures [September 1981 – October 1989]
2	Various Scripps Early Period (After U Chicago) [November 1957 – June 1998]  Harmon Craig Bio-Bibliography UCSD (1 of 4) [July 1955 – November 1999]  Harmon Craig Bio-Bibliography UCSD (2 of 4) [July 1955 – November 1999]

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2	Harmon Craig Bio-Bibliography UCSD (3 of 4) [July 1955 – November 1999]
	Harmon Craig Bio-Bibliography UCSD (4 of 4) [July 1955 – November 1999]
	Original Papers filed by Harmon Craig, Chicago, Olivine, Kauai, and Maui
	Original Papers filed by Harmon Craig, Chicago
	Original Papers filed by Harmon Craig, Chicago
	Original Papers filed by Harmon Craig, Chicago
	Science Spectra: The International Magazine of Contemporary Scientific Thought, Issue 20, 2000
3	Cepheus Expedition: CE Data
	Cepheus Expedition: CE Data, Preliminary Report
	Cepheus Expedition: CE Data [March 1982]
	Cepheus Expedition: CE Plot
	Cepheus Expedition: CE General
	Cepheus Expedition: 20° S EPR [April 1981]
	Cepheus Expedition: 21° N EPR
	Cepheus Expedition: Guaymas Basin, ect [1982]
	[Miscellaneous, 1983-1989]
	3He/4He Data cc. GAD Data Dup. [n.d]
	32 Si – SiO <sub>2</sub> [1963 – 1996]
	Marquesas [1993 – 1999]
	[Unlabeled Data, 1989]
	Helium Capture during Olivine... Natland and Craig, 1999 (1 of 4)

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3	Helium Capture during Olivine... Natland and Craig, 1999 (2of 4)
4	Helium Capture during Olivine... Natland and Craig, 1999 (3 of 4)
	Helium Capture during Olivine... Natland and Craig, 1999 (4 of 4)
	Argon [December 1994 – June 1995]
	[Unlabeled Data, n.d.]
	["NDELTA" = Delta (12/78) for N <sub>2</sub> O (H.C.)]
	Data Sheets [n.d.]
	GAD Data from Ritter Before – Move [May 9, 1999]
	[KIM, September 1991]
	Applications of Argon-39 Detection to Oceanographic Studies [n.d]
	[Miscellaneous, June 1987 – January 1992]
	RARGA [n.d.]
	China-Xenoliths Guiyang Program [July 1977 – April 1986]
	Ethiopia [May 2001]
	Papatua [March 1986 – May 2001]
	PPT-9 Mariana Kagolunia [1982 – 1986]
	A Second-Order Rate Law for Helium and CO <sub>2</sub> Release in Sequential Crushing of Olivine, Cpx and Volcanic Gases, July 1999
5	H. Craig Thermodynamics 9 Chapters [n.d.] (1 of 2)
	H. Craig Thermodynamics 9 Chapters [n.d.] (2 of 2)
	[Miscellaneous, 1982-1989]
	[Argon-39, June 1995]
	[Helios, February 22, 1988]

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[Yellowstone Park, July 1995 – October 1997]

[Miscellaneous, August 1988]

Papers in Physical Oceanography and Meteorology [1949]

SIO 251 Notes, Copy 2, 298, Class Handouts

SIO 251 Notes, Copy 2, [1967]

SIO 251 Notes, Copy 2 [1955-1956]

Archive Harmon Craig Files – Data

[3<sup>rd</sup> Order Jet, n.d.]

[Miscellaneous Water Samples] [June 1973 – August 1987]

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SIO 251 Notes, Copy 2, SIO 251, Thermodynamics of Natural Processes

SIO 251 Notes, Copy 2, SIO 251, Thermodynamics of Natural Processes

SIO 251 Notes, Copy 2, SIO 251, Thermodynamics of Natural Processes

SIO 251 Notes, Copy 2, SIO 251, Thermodynamics of Natural Processes

Antarctica, Burtner Files, (From GAD Coup)

ET-76, Field Copy

ET-76, Field Copy

ET-76, Field Copy [Maps]

ET-76, Field Copy

ET-76, Field Copy

ET-76, Field Copy [contents – pg. 84]

ET-76, Field Copy [pg. 84 – 269]

All Original data, etc. –Ethiopia Field Work, Maps, Etc. [1976]

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6	[UNDP Project ETH/72/002 Report, n.d.]  Corrected Results from the VG5440
7	Statistical Thermodynamics, Lecture Notes, fall 1956, Book I  Statistical Thermodynamics, Book II  [Thermodynamics Figures, n.d.]  Argon-39  Water Samples Book II (Copy) [1967-1978]  Copy – Lab Book, Waters D/H + O18/O16 Book I [January 1958]  [Water Sample Data, n.d.]  [Waters, Steamboat-Citrate] [December 1954 – January 1958]  Original Data – Mariana Trough Expedition [n.d]  [Miscellaneous Data, July 1995]  Geothermal Gases, Rock Analyses I  Hawaii and Maui, Cosmic Ray, Rare Gases, +LOIH  $^3\text{He}/^4\text{He}$ Ratios in Volcanic rocks, 1986  WOCE Leg III, August 27, 1991  Society IS., Tahiti, Mehetia, Teahitea
8	Austral – Cook Island Samples  Marquesas, Caroline IS.  Geothermal $^3\text{He}/^4\text{He}$ , Sample Index, 1986  [Correspondence, July 1974 – February 1987]  Tommy Gold [Aug. 20, 1992]

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**Folder Title**

Academic Senate (and Committee on Research) [Feb. 1990 – March 1993]

[Miscellaneous, 1977-1991]

(Plates) – Correspondence, Tanzania Expedition, 1986

[Miscellaneous, 1978-2001]

Hydros Expedition 1988 Hydros (Shor) Letters

Isotope Lab Salaries – Personnel (confidential) [July 1981 – July 1998]

C-Vitae and Publication List Supp. (Students, Abstracts) [1966 – 2000]

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[Miscellaneous, 1988-2002]

Press Letter, Gold Notes, Bullaro [1979]

[Miscellaneous Correspondence, 1984 – 2003]

CCOP-SOPAC Star Submersible Workshop, 1985

Letters [1960 – 1963]

ET-Lloyd Report [1981-1991]

[Miscellaneous Correspondence, 1983-1995]

[Unlabeled, November 1988]

George Shor, Administrative Confidential [February – May 1966]

GSA Contract Proposal [April 1954 – May 1959]

#501 “The Isotopic Evolution of the Mantle” by D. Anderson [Nov. 1980 – Aug. 1981]

Marianas Horibe – Letters [March 1979 – January 1984]

Re: Ray Weiss Thesis [Sept. 1969 – Jan. 1971]

IAEA Waters [July 1976 – June 1977]

<b>Box</b>	<b>Folder Title</b>
9	1977 Budgets Lab NSF [Aug. – Nov 1976]  [Unlabeled, Oct. 1983 – Jan 1998]
10	[Correspondence and “Southern Washington Cascades” Manuscript by D. Smith and W. Leeman, July 1983 – June 1993]  Brian Clarke – Letters [Jan. 1969 – May 1974]  [Miscellaneous Correspondence, Jan. 1983 – Jan. 1986]  [Ray Weiss Thesis [Sept 1969 – Jan. 1971]  IAEA Waters [July 1976 – June 1977]  1977 Budgets Lab NSF [Aug.-Nov 1976]  [Unlabeled, Oct. 1983 – Jan 1998]  [Correspondence and “Southern Washington Cascades” Manuscript by D. Smith and W. Leeman, July 1983 – June 1993]  Brian Clarke – Letters [Jan. 1969 – May 1974]  [Miscellaneous Correspondence, Jan. 1983 – Jan. 1986]  Letter Proposal Alvin-Loihi, Supp. Letter Nov. 1982]  Surface Waters-Letters Samples Analyzed: Information Recorded [April 1954 – January 1958]  Correspondence – Miscellaneous  Savannah River – Correspondence [Mar. 1970 – Nov 1976]  ET: News [Sept. 1975 – Jan. 1982]  Ethiopia – Getahun Demissie (see Negussie Mekuria) [April 1978 – February 1981]  Correspondence – Miscellaneous [1975-1998] (1 of 2)  Correspondence – Miscellaneous [1975-1998] (2 of 2)



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10	Ethiopia: Letters [July 1975 – Nov. 1977]  Chinese Correspondence [Feb. – May 1980]  KF File [Sept. 1990 – June 1991]
11	[Naval Messages, 1973-1974] (1 of 4)  [Naval Messages, 1973-1974] (2 of 4)  [Naval Messages, 1973-1974] (3 of 4)  [Naval Messages, 1973-1974] (4 of 4)  Core Sampling, Helium Sampling, D. Burtner GRD A020, 1988  [Papers, 1991-1992]  [Papers, 1989-1991]  [Articles, 1969-1994]  Vostok, 1991-1992, Isotope Lab  Polar Proposal, 1988, NSF
12	Thomas Graf, Kr/Ar, 11/1/1996, Isotope Lab Data  [Greenland Ice Sheet Project Two, H. Craig, 1992]  [Greenland Ice Sheet Project Two, H. Craig, Isotope Lab 1991]  [Greenland Ice Sheet Project Two, H. Craig, 1990]  GISP 2, Helium, Sample Log, 1990  GISP 2 Notebook, University of New Hampshire, No. 3, Fall 1993  Antarctica, July 1985 to June 1987  [Papers, 1992]  ICE: CCL, MH, Cores, ETC., Dec. 1977-Jan. 1985  [Papers, 1997]

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12	[GISP Notebook, University of New Hampshire, No. 3, 1993]  Core Processing Data, D. Burtner, GRD A020  [Papers 1983-1993]
13	GISP 2 Core Data Report, 1992  [Papers, 1971-1985]  [Papers 1979-1988]  GISP-8 180 Plots [n.d]  [Papers, 1988-1992]  GISP 2 , 1992, Book I, Isotope Lab  Helium GISP 2, 1993, Book I, Isotope Lab, 193  [Papers, 1993]  [Papers, 1993]  [Papers, 1993]  Brian Anderson, Isotope Laboratory  Brian Anderson, Isotope Lab  Antarctica Photos  [Data, 1956-1985]  [Data, 1956-1985]  [Data, 1956-1985]  [Data, 1956-1985]  [Papers, 1993-1997]
14	Preliminary Depth-Age Scale of the GISP 2 Ice

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14	[Data, GISP 2, Brian Anderson]  Bubbles  JOS. ASC, Iceland ASC  Ice Cores: C Samples, He-Ne-Air  Notes, Vostok, 1991-1992  Ant. Ice Cores, Acc, P, P, Z, Gow, 1968  [Papers 1993]  Polar Ice: Gas, N <sub>2</sub> , O <sub>2</sub> , Ar Data [n.d]  [Papers, 1977]  [Papers, 1983-1995]  GISP 2 Sample Depths  GISP  [Data, 1993-1994]  Stanley L. Miller, The Nature and Occurrence of Clathrate Hydrates  Gravitational Separation of Gases and Isotopes in Polar Ice Caps, H. Craig, Y. Horibe, T. Sowers  Ice Cores : Gases, Bubbles [1958, 1984] GISP [Data, 1993-1994] GISP [Data: GISP, 1993] [GISP: GISP2, 1992]
15	GISP: He- vs. Depth, Diffusion Curves  GISP: GISP2 Data  GISP [Papers, 1975]

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HE Flask Blanks etc., Ice Core GISP

GISP: [Articles, 1982-1997]

GISP: [Papers, 1982-1998]

Ice Cores: He- Ne, Plots, Plotting Files, Data Files[1971-1988]

Ice Transparencies, He, Ne, Air [1971-1981]

Ice: He, Ne  $\frac{3}{4}$ : Data, Notes [1982]

Ice Diffusion Coeffs, Sol [1965-1984]

Tibet Medicine

Tibet

Feb 1980, May 1982 [Papers]

Feb 1980, May 1982 [Articles]

Feb 1980, May 1982 [Photos]

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Feb 1980, May 1982, Programme and Schedule

[Papers: Data 1981]

[Data: Yangbajng]

[Data]

[Papers: 1979-1980]

Data Plot, Helium, NC]

Chemical Study of Thermal and Geothermal Waters From Tibet (China)

[YangBajng Area, Tibet, June 1980]

[Papers, 1983]

Map of the People's Republic of China

[Correspondence, 1980-1981]

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[Papers, 1980]

[Papers, Articles, 1981]

Symposium on Qinghai-Xizang (Tibet) Plateau May 25-31, 1980

Map of Hot Springs and Wells in Yangbajain Geothermal Field

A Scientific Guidebook to South Xizang (Tibet) June 2-June 14, 1980

Tibet[Data]

Jim Natland Pics

Jim Natland Pics

Jim Natland Pics

Alvin: (Submersible)

Research Vessel: Atlantis II, Deep Submergence Vehicle, Alvin

Alvin Letter of Intent- June 1989, Pascua Hot Spot- So. EPR

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Alvin Letter of Intent- June 1989, Pascua Hot Spot- So. EPR May 1989

Corresp. & Copies Alvin, 881429, NSF OCE 8816426 [1988]

Alvin EPR – Originals – UCSD 881429 [1988]

Alvin EPR – Originals – UCSD 881429 [1988-1989]

Alvin Letter Proposal – UNOLS June 88, EPR 26 to 31 South

Letter of Intent, Alvin- AII, EPR 13-35 S

Alvin-AII, Research Vessel, Atlantis II, Deep Submergence Vehicle,  
Alvin

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Alvin-AII etc. [1984-1987]

[Papers, 1982-1986]

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17	[Papers, 1981-1985]  Alvin 13 N Basalts [Papers, 1974-1989]  [Papers, 1974-1989]  [Papers, October-November 1986]  [Papers, 1987]  Alvin, Current Info, Notes (13 N, Mariana) [1982-1988]
18	Alvin, Current Info, Notes (13 N, Mariana) [1982-1985]  [Papers, 1985-1988]  [Papers, 1986-1987]  Alvin Review Committee, Summary Report, August 1986]  [Alvin Review Committee Summary Report/Papers 1982-1988]  [Papers, 1986]  [Papers, 1984]  [Papers, 1981-1984]  Project CYATHERM: Detailed Investigation of Hydrothermal Activity at 12 50N on the East Pacific Rise  Letter Proposal for Alvin Review Committee, 26 February 1982  Alvin Files: Alvin 13 North [1983-984]  Alvin Files: Alvin 13 North [1983-1984]  Intense Hydrothermal Activity at the Axis of the East Pacific Rise Near 13 N..., "Chain Site" 1982 Dives  [Data, 1982]  [Papers, 1982]  [Papers, 1983-1986]

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18	Alvin Mariana Exp. April 1987  [Papers, 1981-1982]  Alvin Submersible Expedition Loihi Caldera, Hawaii, Feb 1987]  Alvin Dives [1981]  [Alvin Data]
19	[Alvin Data]  [Papers, Photos, 1986]  Technical Memorandum WHOI 3-76, Woods Hole Oceanographic Institution, Nov 1976]  Alvin 21 N, November 1979  [Papers, 1982-1987]  [University National Oceanographic Laboratory System, Summary Reports, 1982-1987]  Alvin Review Committee Summary Report, 1984  Alvin Review Committee Summary Report, 1985  Alvin, Review Committee Summary Report, 1984  Rock Crushing Equipment Cat. And Instructions
20	[Various Data, 1978]  MS Calculations  Isotope Lab, Spectrometer Calculations  Oceanographic Data Tp-S 6t-6p, 720 Programs  Physical and Chemical Characteristics of Lake Tiberias  Map, Lahaina Quadrangle  Map, Circum-Pacific Region

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[Data, 1988]

[Map, The Dead Sea]

Ecology of Deepwater Biological Communities in Lake Tanganyika

[Various Maps]

[Data, Notes, n.d.]

[Notes, Rare Gases]