



Illinois Department of Nuclear Safety

1035 Outer Park Drive
Philip F. Gustafson
Director

Springfield, Illinois 62704

(217) 546-8100

February 23, 1983

B.J. Holt
Materials Licensing Section
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

RE: Control #07299

Dear Ms. Holt:

Thank you for your letter of February 2, 1983, concerning this Department's request to amend our USNRC license.

In answer to your questions, we supply the following information:

1. The space located at 580 North Street is used for storage of equipment and supplies and for electronic repair. The space located at 550 North Street is used for the storage and maintenance of equipment and vehicles for radiological emergency response activities. It also houses six (6) X-ray machines which are used for training purposes. The requirements of 10CFR20.202 will be met as applicable.
2. The facilities will be used: (1) as indicated in Item 1 above, and (2) in accordance with Items 9A, 9D, 9E, and 9F of our license (#12-20094-01).
3. To maintain flexibility in departmental functions, and in light of state and federal governmental operations, including time frames, this Department has found it prudent to amend our license to include all new departmental locations, as they are added, statewide.
4. Supplemental information concerning Donald Cohen and Timothy Runyon is attached.

8509060333 850829
PDR FOIA
HUBER85-189 PDR

B.J. Holt
U.S. Nuclear Regulatory Commission

- 2 -

Thank you for your help in this matter. If I may be of any further assistance, please let me know.

Sincerely,

Paul D. Eastvold

Paul D. Eastvold, Chief
Division of Nuclear Materials

PDE/mfm

Encls.

cc: Dr. Gustafson, Director, IDNS
License File

Donald Cohen

Ra ²²⁶	mg
Th ²³²	grams
Pa ²³¹	mg
U ²³²	mg
U ²³³	mg
U ²³⁴	mg
U ²³⁵	g
U ²³⁶	mg
U ²³⁸	Kg
Np ²³⁷	g
Np ²³⁹	Tracer
Pu ²³⁹	g
Pu ²⁴⁰	mg
Pu ²⁴²	g
Pu ²⁴⁴	mg
Am ²⁴¹	mg
Am ²⁴³	mg
Cm ²⁴⁴	mg
Cm ²⁴⁶	mg
Bk ²⁴⁷	mg
Cf ²⁵⁰	mg
Cf ²⁵²	mg
Es ²⁵²	mg
Es ²⁵⁴	μg
Fm + Md	Tracers

Kr, Rn, I, Cs, Tc, Sr, Xe and other
radioactive isotopes for tracer use.

DONALD COHEN

Publications -
Open Literature

1949

STANDARD POTENTIAL OF THE MERCURY-MERCURY (I) PHOSPHATE ELECTRODE

T. De Vries* and D. Cohen

J. Amer. Chem. Soc. 71, 114 (1949)

1952

THE OXIDATION POTENTIALS OF THE NEPTUNIUM(III)-(IV) AND THE NEPTUNIUM(V)-(VI) COUPLES IN PERCHLORIC ACID

D. Cohen and J. C. Hindman

J. Amer. Chem. Soc. 74, 4679-4682 (1952)

THE NEPTUNIUM(IV)-NEPTUNIUM(V) COUPLE IN PERCHLORIC ACID. THE PARTIAL MOLAL HEATS AND FREE ENERGIES OF FORMATION OF NEPTUNIUM IONS

D. Cohen and J. C. Hindman

J. Amer. Chem. Soc. 74, 4682-4685 (1952)

1954

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION.

I. THE Np(V)-Np(VI) EXCHANGE

D. Cohen, J. C. Sullivan, and J. C. Hindman

J. Amer. Chem. Soc. 76, 352-354 (1954)

KINETICS OF REACTION BETWEEN NEPTUNIUM IONS. THE NEPTUNIUM(IV)-NEPTUNIUM(VI) REACTION IN PERCHLORATE SOLUTION

J. C. Hindman, J. C. Sullivan, and D. Cohen

J. Amer. Chem. Soc. 76, 3278-3280 (June 1954)

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION.

II. THE Np(IV)-Np(V) EXCHANGE

J. C. Sullivan, D. Cohen, and J. C. Hindman

J. Amer. Chem. Soc. 76, 4275-4279 (1954)

1955

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION.

III. THE EFFECT OF CHLORIDE AND NITRATE IONS ON THE RATE OF THE Np(V)-Np(VI) EXCHANGE

D. Cohen, J. C. Sullivan, and J. C. Hindman

J. Amer. Chem. Soc. 77, 4964-4968 (October 1955)

THE BEHAVIOR OF URANYL AND NEPTUNYL IONS WITH DOWEX-50 CATION-EXCHANGE RESIN

J. C. Sullivan, J. C. Hindman, and D. Cohen

J. Amer. Chem. Soc. 77, 6203-6204 (December 1955)

DONALD COHEN

Publications -
Open Literature1956

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION.
IV. THE EFFECT OF VARIATION OF DIELECTRIC CONSTANT ON THE RATE
OF THE Np(V)-Np(VI) EXCHANGE

D. Cohen, J. C. Sullivan, E. S. Amis*, and J. C. Hindman
J. Amer. Chem. Soc. 78, 1543-1545 (April 1956)

KINETICS OF THE REACTION BETWEEN Np(IV) AND Np(VI) IN A MIXED SOLVENT

E. Amis*, D. Cohen, J. C. Hindman, and J. C. Sullivan
J. Phys. Chem. 60, 701 (May 1956)

1957

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION.
V. THE Np(V)-Np(VI) EXCHANGE IN D₂O

J. C. Sullivan, J. C. Hindman, and D. Cohen
J. Amer. Chem. Soc. 79, 3672-3674 (July 1957)

KINETICS OF REACTIONS INVOLVING NEPTUNIUM(IV), NEPTUNIUM(V), AND
NEPTUNIUM(VI) IONS IN SULPHATE MEDIA

J. C. Sullivan, D. Cohen, and J. C. Hindman
J. Amer. Chem. Soc. 79, 4029-4034 (August 1957)

1958

KINETICS OF THE NEPTUNIUM(III)-NEPTUNIUM(V) REACTION IN PERCHLORATE
SOLUTION

J. C. Hindman, J. C. Sullivan, and D. Cohen
J. Amer. Chem. Soc. 80, 1812-1814 (April 1958)

A KINETIC STUDY OF THE REDUCTION OF NEPTUNIUM(VI) BY HYDROGEN
PEROXIDE

A. J. Zielen, J. C. Sullivan, D. Cohen, and J. C. Hindman
J. Amer. Chem. Soc. 80, 5632-5635 (November 1958)

THE PHOTOCHEMICAL REDUCTION AND THE AUTOREDUCTION OF NEPTUNIUM(VI)

A. J. Zielen, J. C. Sullivan, and D. Cohen
J. Inorg. Nucl. Chem. 7, 378-383 (1958)

1959

THE EFFECT OF DEUTERIUM ON THE KINETICS OF REACTIONS INVOLVING
NEPTUNIUM(IV), (V), AND (VI) IONS

J. C. Hindman, J. C. Sullivan, and D. Cohen
J. Amer. Chem. Soc. 81, 2316-2319 (May 1959)

THE HALF-LIFE OF ²³⁹Np

D. Cohen, J. C. Sullivan, and A. J. Zielen
J. Inorg. Nucl. Chem. 11, 159-161 (August 1959) Note

DONALD COHEN
Publications -
Open Literature

1960

- ABSORPTION SPECTRA OF U(III) AND U(IV) IN DClO_4 SOLUTION
D. Cohen and W. T. Carnall
J. Phys. Chem. 64, 1933-1936 (1960)

1961

- ELECTROCHEMICAL STUDIES OF PLUTONIUM IONS IN PERCHLORIC ACID SOLUTIONS
D. Cohen
J. Inorg. Nucl. Chem. 18, 207-210 (March 1961)
- THE ABSORPTION SPECTRA OF PLUTONIUM IONS IN PERCHLORATE ACID SOLUTIONS
D. Cohen
J. Inorg. Nucl. Chem. 18, 211-218 (March 1961)
- Np(VI) IN MOLTEN NITRATES
D. Cohen
J. Amer. Chem. Soc. 83, 4094 only (October 1961)

1962

- SOME OBSERVATIONS OF Np(VI) IN CHLORIDE SOLUTIONS
D. Cohen and B. Taylor*
J. Inorg. Nucl. Chem. 22, 151-153 (1962)

1963

- THE ATTEMPTED PREPARATION OF AmF_6
S. Tsujimura*, D. Cohen, C. L. Chernick, and B. Weinstock
J. Inorg. Nucl. Chem. 25, 226-227 (March 1963) Note
- OXIDES OF Np(V) AND Np(VI) FROM MOLTEN SALTS
D. Cohen
Inorg. Chem. 2, 866-867 (August 1963)

1964

- NEPTUNIUM PENTOXIDE
D. Cohen and A. J. Walter*
J. Chem. Soc. 1964, 2696-2699 (August 1964)

1966

- AMERICIUM(III) PERXENATE
Y. Marcus* and D. Cohen
Inorg. Chem. 5 (10), 1740-1743 (October 1966)

DONALD COHEN
Publications -
Open Literature

1967

THE ABSORPTION SPECTRA OF Bk^{3+} AND Bk^{4+} IN SOLUTION
R. G. Gutmacher*, E. K. Hulet*, R. Loughheed*, J. G. Conway*,
W. T. Carnall, D. Cohen, T. K. Keenan*, and R. D. Baybarz*
J. Inorg. Nucl. Chem. 29, 2341-2345 (1967)

ACTINIDE CHEMISTRY IN SATURATED KF SOLUTION
D. Cohen
Lanthanide/Actinide Chemistry, Advances in Chemistry
Series #71, Chapter 19, 1967, pp. 256-267

1968

THE PREPARATION AND CRYSTAL STRUCTURE OF SOME BERKELIUM COMPOUNDS
D. Cohen, S. M. Fried, S. Siegel, and B. Tani
Inorg. Nucl. Chem. Lett. 4, 257-260 (1968)

ISOMER SHIFTS AND HYPERFINE SPLITTINGS OF THE 59.6-keV RESONANCE
IN $^{237}_{Np}$
B. D. Dunlap*, G. M. Kalvius*, S. L. Ruby*, M. B. Brodsky*,
and D. Cohen
Hyperfine Structure and Nuclear Radiations, Amsterdam, 1968

ISOMER SHIFT AND HYPERFINE SPLITTINGS OF THE 59.6-keV MÖSSBAUER
RESONANCE IN $^{237}_{Np}$
B. D. Dunlap*, G. M. Kalvius*, S. L. Ruby*, M. B. Brodsky*,
and D. Cohen
Phys. Rev. 171, 316-321 (July 1968)

COMPOUNDS OF CALIFORNIUM
S. M. Fried, D. Cohen, S. Siegel, and B. Tani
Inorg. Nucl. Chem. Lett. 4, 495-498 (September 1968)

THE CO-PRECIPITATION OF Cm^{+3} AND Cf^{+3} WITH $BaSO_4$ AND THE PLUS TWO
STATE OF CALIFORNIUM
S. M. Fried and D. Cohen
Inorg. Nucl. Chem. Lett. 4, 611-615 (October 1968)

1969

MÖSSBAUER ISOMER SHIFT IN $^{243}_{Am}$
G. M. Kalvius*, S. L. Ruby*, B. D. Dunlap*, G. K. Shenoy*,
D. Cohen, and M. B. Brodsky*
Phys. Lett. 29B (8), 489-490 (July 1969)

SOME OBSERVATIONS ON THE CHEMISTRY OF NEPTUNIUM IN BASIC SOLUTION
D. Cohen and S. Fried
Inorg. Nucl. Chem. Lett. 5, 653-663 (1969)

DONALD COHEN

Publications -
Open Literature

1969 (Cont'd)

NUCLEAR GAMMA-RAY RESONANCE STUDY OF HYPERFINE INTERACTIONS IN ^{238}U
S. L. Ruby*, G. M. Kalvius*, B. D. Dunlap*, G. K. Shenoy*,
D. Cohen, M. B. Brodsky, and D. J. Lam*
Phys. Rev. 184, 374-380 (August 10, 1969)

1970

THE NEPTUNIUM(VII)-(VI) COUPLE IN SODIUM HYDROXIDE SOLUTIONS
A. J. Zielen and D. Cohen
J. Phys. Chem. 74, 394-405 (January 22, 1970)

THE PREPARATION AND SPECTRUM OF URANIUM(V) IONS IN AQUEOUS SOLUTIONS
D. Cohen
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THE REACTION OF RHENIUM AND TECHNETIUM METALS WITH MOLTEN LITHIUM
PERCHLORATE AND THE RAMAN SPECTRA OF THE CORRESPONDING MELTS
D. Cohen, S. M. Fried, and H. Selig*
J. Inorg. Nucl. Chem. 33, 2687-2688 (August 1971) Note

ELECTRON DENSITIES AND ISOMER SHIFTS FOR VARIOUS NEPTUNIUM IONS
B. D. Dunlap*, G. K. Shenoy*, G. M. Kalvius*, D. Cohen,
and J. B. Mann*
Hyperfine Interactions and Excited Nuclei, Goldring and
Kalish, Eds., Gordon & Breach, London, 1971, pp. 709-717

1972

AMERICIUM(VI) IN BASIC SOLUTION
D. Cohen
Inorg. Nucl. Chem. Lett. 8 (6), 533-535 (1972)

PRODUCTION OF ACTINIDES AND THE SEARCH FOR SUPER-HEAVY ELEMENTS
USING SECONDARY REACTIONS INDUCED BY GeV PROTONS
J. P. Unik, E. P. Horwitz, K. L. Wolf, I. Ahmad, S. M. Fried,
D. Cohen, P. R. Fields, C. A. A. Bloomquist, and D. J. Henderson
Nucl. Phys. A191 (2), 233-244 (1972)

1973

ELECTRONIC ENERGY LEVEL AND INTENSITY CORRELATIONS IN THE SPECTRA
OF THE TRIVALENT ACTINIDE AQUO IONS. I. Es^{3+}
W. T. Carnall, D. Cohen, P. R. Fields, R. K. Sjolom,
and R. F. Barnes
J. Chem. Phys. 59 (4), 1785-1789 (August 15, 1973)

DONALD COHEN

Publications -
Open Literature

1974

HYPERFINE INTERACTIONS AND NUCLEAR MOMENTS IN EVEN URANIUM ISOTOPES FROM MÖSSBAUER SPECTROSCOPY

R. D. Meeker*, G. M. Kalvius*, B. D. Dunlap*, S. L. Ruby*,
and D. Cohen

Nucl. Phys. A224, 429-436 (May 1974)

ABSORPTION SPECTRA OF NpCl_3 AND NpBr_3

W. T. Carnall, H. M. Crosswhite, R. G. Pappalardo*,
D. Cohen, S. M. Fried, P. Lucas*, and F. Wagner, Jr.
J. Chem. Phys. 61 (12), 4993-5008 (December 15, 1974)

1975

OXIDATION REDUCTION REACTIONS OF THE TRANSURANIUM ELEMENTS

D. Cohen

Radiokhimiya 17 (4), 623-631 (1975)

1976

OXIDATION-REDUCTION REACTIONS OF THE TRANSURANIUM ELEMENTS

D. Cohen

J. Inorg. Nucl. Chem., Supplement 1976, pp. 41-49

PULSE RADIOLYSIS STUDIES OF URANIUM(VI), NEPTUNIUM(VI), NEPTUNIUM(V),
AND PLUTONIUM(VI) IN AQUEOUS PERCHLORATE MEDIA

J. C. Sullivan, S. Gordon, D. Cohen, W. Mulac, and
K. H. Schmidt

J. Phys. Chem. 80 (15), 1684-1686 (1976)

PULSE RADIOLYSIS STUDIES OF AMERICIUM(III) AND CURIUM(III) IONS
IN PERCHLORATE MEDIA. THE PREPARATION OF Am II, Am IV, Cm II
AND Cm IV

J. C. Sullivan, S. Gordon, W. A. Mulac, K. H. Schmidt,
D. Cohen, and R. Sjoblom

Inorg. Nucl. Chem. Lett. 12, 599-601 (1976)

THE ABSORPTION SPECTRUM OF Np(VII) IN ACID SOLUTION

D. Cohen

Inorg. Nucl. Chem. Lett. 12, 635-637 (1976)

MÖSSBAUER EFFECT MEASUREMENTS IN ^{237}Np USING THE β -DECAY OF ^{237}U

R. D. Meeker*, B. D. Dunlap*, and D. Cohen

J. Phys. Chem. Solids 37, 551-553 (1976)

1978

MÖSSBAUER RESONANCE IN ^{240}Pu

G. M. Kalvius*, D. Cohen, B. D. Dunlap*, and G. K. Shenoy*

Phys. Rev. B 18 (9), 4581-4587 (1 November 1978)

DONALD COHEN
Publications -
Open Literature

1979

MÖSSBAUER RESONANCE IN ^{240}Pu

G. M. Kalvius*, D. Cohen, B. D. Dunlap*, and G. K. Shenoy*
J. de Physique, Colloque C2, Supplement 3, 40, C2-634 (March 1979)

1980

THE RADIOLYTIC OXIDATION AND REDUCTION OF PLUTONIUM

S. Fried, A. Friedman, J. C. Sullivan, K. Nash*, D. Cohen,
and R. Sjoblom

Scientific Basis for Nuclear Waste Management, Vol. 2,
C. J. M. Northrup, Jr., Ed., Plenum Publishing Corporation,
New York, 1980, pp. 655-664

DONALD COHEN

Publications - Other
Than Open Literature

1951

THE OXIDATION POTENTIALS OF THE NEPTUNIUM(III)-(IV) AND THE NEPTUNIUM(V)-(VI) COUPLES IN PERCHLORIC ACID

D. Cohen and J. C. Hindman

Argonne National Laboratory Report ANL-4782 (June 1951)

THE NEPTUNIUM(IV)-NEPTUNIUM(V) COUPLE IN PERCHLORIC ACID. THE PARTIAL MOLAL HEATS AND FREE ENERGIES OF FORMATION OF NEPTUNIUM IONS

D. Cohen and J. C. Hindman

Argonne National Laboratory Report ANL-4783 (June 1951)

1953

THE ISOLATION AND PURIFICATION OF NEPTUNIUM-237 OBTAINED FROM HANFORD WASTES

J. C. Hindman, P. Wehner*, J. C. Sullivan, and D. Cohen

Argonne National Laboratory Report ANL-5037 (May 1953)

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION. I. THE Np(V)-Np(VI) EXCHANGE

D. Cohen, J. C. Sullivan, and J. C. Hindman

Argonne National Laboratory Report ANL-5042 (April 1953)

1955

SOME RECENT DEVELOPMENTS IN THE CHEMISTRY OF NEPTUNIUM

J. C. Hindman, D. Cohen, and J. C. Sullivan

International Conference on the Peaceful Uses of Atomic Energy, A/Conf. 8/P/736 (June 1955)

ISOTOPIC EXCHANGE REACTIONS OF NEPTUNIUM IONS IN SOLUTION. IV. THE EFFECT OF VARIATION OF DIELECTRIC CONSTANT ON THE RATE OF THE Np(V)-Np(VI) EXCHANGE

D. Cohen, J. C. Sullivan, E. S. Amis*, and J. C. Hindman

NSA-9-7735 #23 (December 1955)

1965

THE PURIFICATION OF 10 CURIES OF Cm^{242}

E. P. Horwitz, C. A. A. Bloomquist, H. W. Harvey, D. Cohen, and L. J. Basile

Argonne National Laboratory Report ANL-5998 (February 1965)

1969

STUDY OF ACTINIDE CHEMISTRY IN SATURATED POTASSIUM FLUORIDE SOLUTION

C. E. Thalmayer and D. Cohen

AEC-NASA Tech Brief 69-10004 (January 1969)

DONALD COHEN

Publications - Other
Than Open Literature

1970

ANION-EXCHANGE SEPARATION OF NEPTUNIUM FROM URANIUM AND THORIUM
 IN BASIC SOLUTION

A. P. Masino*, K. A. Orlandini*, S. M. Fried, and D. Cohen
 Argonne National Laboratory Report ANL-7751 (October 1970)

1976

PULSE RADIOLYSIS OF THE LANTHANIDE AND ACTINIDE ELEMENTS

S. Gordon, J. C. Sullivan, W. A. Mulac, D. Cohen, and
 K. H. Schmidt

Proceedings, Fourth Symposium on Radiation Chemistry, 1976,
 Publishing House of the Hungarian Academy of Sciences,
 pp. 753-760

1979

OPEN-CYCLE COAL-FIRED LIQUID-METAL MHD

E. S. Pierson*, M. Petrick*, F. Schreiner, and D. Cohen
 Proceedings, 18th Symposium, Engineering Aspects of Magneto-
 hydrodynamics, Butte, Montana, June 18-20, 1979, pp. D-2.3.1-8

OPEN-CYCLE COAL-FIRED LIQUID-METAL MHD

E. S. Pierson*, M. Petrick*, F. Schreiner, D. Cohen, and
 R. S. Smith*
 Proceedings, 14th Intersociety Energy Conversion Engineering
 Conference, Boston, Massachusetts, August 1979, pp. 1912-1917

1980

LIQUID-METAL MHD FOR SOLAR AND COAL

E. S. Pierson*, D. Cohen, and S. J. Grammel*
 7th International Conference on MHD Electrical Power Generation,
 Massachusetts Institute of Technology, Cambridge, Massachusetts,
 June 16-20, 1980, pp. 150-157

LIQUID-METAL MHD FOR SOLAR AND COAL: SYSTEM AND COMPONENT STATUS

E. S. Pierson*, S. J. Grammel*, D. Cohen, and T. Frisardi*
 Proceedings, 15th Intersociety Energy Conversion Engineering
 Conference, Seattle, Washington, August 1980, pp. 505-512

COAL-FIRED OPEN-CYCLE LIQUID-METAL MAGNETOHYDRODYNAMIC TOPPING CYCLE
 FOR RETROFIT OF STEAM POWER PLANTS

E. S. Pierson*, H. Herman*, M. Petrick*, R. W. Boom*,
 L. Carlson*, D. Cohen, G. Dubey*, S. J. Grammel*, F. Schreiner,
 B. K. Snyder*, and T. Zinneman*
 Argonne National Laboratory Report ANL/MHD-80-18 (1980)

DONALD COHEN

Talks and Seminars1950

DIELECTRIC PROPERTIES OF FLUORINE-CONTAINING COMPOUND

T. De Uries*, E. T. McBee*, and D. Cohen
118th American Chemical Society National Meeting,
September 1950

1951

THERMODYNAMICS OF NEPTUNIUM IONS IN PERCHLORIC ACID

D. Cohen and J. C. Hindman
XII International Congress of Pure and Applied Chemistry,
September 1951

1954

ISOTOPIC EXCHANGE REACTIONS OF Np IONS IN SOLUTION. THE Np(IV)-Np(V) EXCHANGE

J. C. Sullivan, D. Cohen, and J. C. Hindman
126th American Chemical Society National Meeting,
September 1954

1961

THE TRANSURANIC ELEMENTS

D. Cohen
Cornell College, Mount Vernon, Iowa, 1961

THE TRANSURANIC ELEMENTS

D. Cohen
Goshen College, Goshen, Indiana, 1961

1963

SOME MOLTEN SALT WORK WITH THE ACTINIDES AND RADIOPOLAROGRAPHY

D. Cohen
Actinide Element Research, Mol, Belgium,
March 12-13, 1963

SOME RECENT WORK ON HEAVY METALS IN MOLTEN SALTS

D. Cohen
Chemistry Seminar, Harwell, England,
March 20, 1963

SOME RECENT WORK IN ACTINIDE CHEMISTRY

D. Cohen
Ispra, Italy, April 1963

THE REACTION OF METALS WITH MOLTEN LITHIUM PERCHLORATE

D. Cohen
XIX International Congress of Pure and Applied Chemistry,
London, July 15, 1963

DONALD COHEN

Talks and Seminars1964

THE TRANSURANIC ELEMENTS

D. Cohen

Science Club, Downers Grove Community High School,
April 19641965

PREP AND PROPERTIES OF THE TRANSURANIUM ELEMENTS

D. Cohen

American Chemical Society Affiliate, Lake Forest College,
Lake Forest, Illinois, April 19651966

THE PREPARATION AND CHARACTERIZATION OF Am(III) PERXENATE

Y. Marcus* and D. Cohen

XXXV Meeting, Israel Chemical Society, Haifa, Israel,
February 1966

ACTINIDE CHEMISTRY IN SATURATED POTASSIUM FLUORIDE SOLUTION

D. Cohen

152nd American Chemical Society National Meeting,
New York, September 11-16, 1966

TRANSPLUTONIUM CHEMISTRY AT THE ARGONNE NATIONAL LABORATORY

D. Cohen and A. M. Friedman

International Transplutonium Element Symposium,
Oak Ridge National Laboratory, November 10, 1966

RADIOPOLAROGRAPHY

D. Cohen

Chemical Society, Miami University, November 17, 1966

1968

SOME RECENT STUDIES IN TRANSPLUTONIUM CHEMISTRY

D. Cohen

Symposium on Macroscopic Studies of the Actinides--Basic
Chemistry, 155th American Chemical Society National Meeting,
San Francisco, California, March 31-April 15, 19681969NGR MEASUREMENTS WITH ^{238}U S. L. Ruby*, G. M. Kalvius*, B. D. Dunlap*, G. K. Shenoy*,
M. B. Brodsky*, and D. CohenAmerican Physical Society Meeting, New York,
February 3-6, 1969

DONALD COHEN

Talks and Seminars1970

ACTINIDE CHEMISTRY IN BASIC SOLUTIONS

D. Cohen and S. M. Fried

American Chemical Society Meeting, Houston, Texas,
February 1970

ELECTRON DENSITIES AND ISOMER SHIFTS FOR VARIOUS NEPTUNIUM IONS

B. D. Dunlap*, G. K. Shenoy*, G. M. Kalvius*, D. Cohen,
and J. B. Mann*International Conference on Hyperfine Interactions,
Rehovath, Israel, September 6-11, 19701971

THE AMPHOTERICITY OF Am AND Cm

D. Cohen

Third International Transplutonium Symposium,
Argonne National Laboratory, October 19711972

OXIDATION-REDUCTION REACTIONS OF THE TRANSURANIUM ELEMENTS

D. Cohen

Symposium on the Chemistry of Transuranium Elements,
Moscow, USSR, September 4-8, 19721973

A SCIENTIST IN RUSSIA

D. Cohen

Friends of the Library, Downers Grove Public Library,
Downers Grove, Illinois, February 9, 1973

THE PRODUCTION AND PROPERTIES OF THE TRANSURANIUM ELEMENTS

D. Cohen

Grinnell Chapter, American Chemical Society,
Grinnell College, Grinnell, Iowa, March 29, 1973

A SCIENTIST IN MOSCOW

- D. Cohen

Earth Science Club of Northern Illinois, Highland School,
Downers Grove, Illinois, April 13, 19731974MÖSSBAUER EFFECT MEASUREMENTS FROM β DECAY SOURCES OF ^{237}Np

R. D. Meeker*, B. D. Dunlap*, and D. Cohen

American Physical Society Annual Meeting, Chicago, Illinois,
February 4-7, 1974

DONALD COHEN

Talks and Seminars1974 (Cont'd)

CHEMICAL AND SPECTROSCOPIC INVESTIGATIONS WITH THE HEAVY ACTINIDE ELEMENTS

W. T. Carnall, D. Cohen, F. Wagner, Jr., R. K. Sjoblom,
and R. F. Barnes

Third Latin American Meeting on Radiochemistry, Buenos Aires,
Argentina, June 17-21, 1974

CRYSTALLOGRAPHIC GROUPS AND ELECTRONIC STRUCTURE IN +3 ACTINIDE AND LANTHANIDE COMPOUNDS

W. T. Carnall, D. Cohen, S. M. Fried, and F. Wagner, Jr.
Symposium on the Relationship Between Crystal Structure
and Electronic Properties of Solids, American Chemical
Society National Meeting, Atlantic City, New Jersey,
September 8-13, 1974

1975

RADIOLYSIS OF AQUEOUS SOLUTIONS OF Np AND Am

S. Gordon, J. C. Sullivan, D. Cohen, W. T. Carnall,
W. Delphin, K. H. Schmidt, and W. A. Mulac

Edwin J. Hart International Conference on Radiation
Chemistry, Argonne National Laboratory, July 7-9, 1975

1976

PULSE RADIOLYSIS OF THE LANTHANIDE AND ACTINIDE ELEMENTS

S. Gordon, J. C. Sullivan, W. A. Mulac, D. Cohen, and
K. H. Schmidt

Fourth Symposium on Radiation Chemistry, Keszthely,
Lake Balaton, Hungary, 1-5 June 1976

NEPTUNIUM IONS IN PHOSPHORIC ACID

D. Cohen

American Chemical Society Meeting, San Francisco,
California, August 29 - September 3, 1976

1977

NEPTUNIUM CHEMISTRY AND RADIOACTIVE WASTE MANAGEMENT

D. Cohen

American Chemical Society Meeting, Chicago, Illinois,
August 29 - September 2, 1977

PULSE RADIOLYSIS STUDIES OF ACTINIDES AND LANTHANIDES

J. C. Sullivan, S. Gordon, W. A. Mulac, K. H. Schmidt,
R. Sjoblom, and D. Cohen

American Chemical Society Meeting, Chicago, Illinois,
August 29-September 2, 1977

DONALD COHEN

Talks and Seminars

1977 (Cont'd)

CHEMICAL PROPERTIES OF Pu, Am, Np, I, AND Tc AND THEIR INFLUENCE ON MIGRATION

A. M. Friedman, S. Fried, D. Cohen, J. Hines, R. Strickert*, and C. Sabau*

Symposium on Management of Low Level Wastes, Atlanta, Georgia, May 23-27, 1977

1978

MÖSSBAUER RESONANCE IN ^{240}Pu

B. D. Dunlap*, G. M. Kalvius*, G. K. Shenoy*, and D. Cohen
American Physical Society Meeting, Washington, D. C.,
March 27-30, 1978

SUMMARY OF ACTIVITIES AND PLANS ON STABILITIES OF ACTINIDES IN CHLORIDE MEDIA

S. Fried, D. Cohen, F. Schreiner, J. Sullivan, R. Sjoblom, and A. Friedman

Seabed Disposal Program Annual Workshop, Sandia Laboratories, Boulder, Colorado, November 16-18, 1978

THE STABILITY OF PLUTONIUM (III) IN VARIOUS CHLORIDE SOLUTIONS

S. Fried, F. Schreiner, D. Cohen, J. C. Sullivan, R. Sjoblom, and A. Friedman

Seabed Disposal Program Annual Workshop, Sandia Laboratories, Boulder, Colorado, November 16-18, 1978

1979

THE OXIDATION OF PLUTONIUM TO HIGHER STATES BY RADIATION

D. Cohen, S. Fried, A. M. Friedman, F. Schreiner, R. Sjoblom, and J. C. Sullivan

American Nuclear Society Meeting, Atlanta, Georgia, June 3-8, 1979

OPEN-CYCLE COAL-FIRED LIQUID-METAL MHD

E. S. Pierson*, M. Petrick*, F. Schreiner, and D. Cohen

18th Symposium on Engineering Aspects of Magnetohydrodynamics, Butte, Montana, June 18-20, 1979

THE RADIOLYSIS OF Pu IN VARIOUS SOLUTIONS

S. Fried, A. Friedman, J. C. Sullivan, K. Nash*, D. Cohen, F. Schreiner, and R. Sjoblom

Invited Paper, American Nuclear Society Meeting, Atlanta, Georgia, June 3-8, 1979

OPEN-CYCLE COAL-FIRED LIQUID-METAL MHD

E. S. Pierson*, M. Petrick*, F. Schreiner, D. Cohen, and R. S. Smith*

14th Intersociety Energy Conversion Engineering Conference, Boston, Massachusetts, August 1979

DONALD COHEN

Talks and Seminars1979 (Cont'd)

THE RADIOLYTIC OXIDATION AND REDUCTION OF PLUTONIUM

S. Fried, A. Friedman, J. C. Sullivan, K. Nash*, D. Cohen, and R. Sjoblom

"Scientific Basis for Nuclear Waste Management,"
International Symposium sponsored by the Materials Research Society, Boston, Massachusetts, November 27-30, 1979

1980

LIQUID METAL MHD FOR SOLAR AND COAL

E. S. Pierson*, D. Cohen, and S. J. Grammel*

7th International Conference on MHD Electrical Power Generation, Massachusetts Institute of Technology, Cambridge, Massachusetts, June 16-20, 1980

LIQUID-METAL MHD FOR SOLAR AND COAL: SYSTEM AND COMPONENT STATUS

E. S. Pierson*, S. J. Grammel*, D. Cohen, and T. Frisardi*
15th Intersociety Energy Conversion Engineering Conference, Seattle, Washington, August 1980

1981THE USE OF ^{222}Rn AS A FLOW PATH MONITOR FOR STUDIES OF RADIONUCLIDE TRANSPORT IN FISSURES

J. J. Hines, D. Cohen, S. Fried, and A. M. Friedman
Materials Research Society Annual Meeting, Boston, Massachusetts, November 16-19, 1981

THE IMMOBILIZATION OF CARBON-14 FORMED DURING REACTOR OPERATIONS

S. Fried, F. Schreiner, D. Cohen, J. J. Hines, and A. M. Friedman
Materials Research Society Annual Meeting, Boston, Massachusetts, November 16-19, 1981

RESUME OF: Timothy A. Runyon

Phone: []

PERSONAL DATA

Birthdate: []
Height: []
Weight: []
Health: []
Marital Status: []

ACADEMIC HISTORY

Western Illinois University 1976-77
General Education 38 quarter hours

Illinois Central College 1977-79
Radiologic Technology
Associates Degree in Applied Science
A.R.R.T. - registration fall 1979
2400 hours clinical practice

ADDITIONAL TRAINING

O.S.H.A. - Recognition, Evaluation and Control of Radiation
Argonne National Laboratories - July 13-24, 1981

REECO - Emergency Response for Radiological Accidents
Las Vegas and Mercury Nevada - October, 1981

EMPLOYMENT RECORD

November 5, 1979 - Present
Field Inspector
Illinois Department of Nuclear Safety
5415 N. University
Peoria, Illinois 61614

August 28 - November 2, 1979
Radiographer
Methodist Medical Center
Peoria, Illinois 61614

January 1978 - August 1979
Student Radiographer
Pekin Memorial Hospital
Court and 14th Streets
Pekin, Illinois 61554

RADIOACTIVE MATERIALS EXPERIENCE

- Spring 1979 -One month rotation through the Nuclear Medicine Department at Pekin Memorial Hospital, Pekin, Illinois, as part of Clinical Radiologic Technology training.
- The predominant isotope used was technetium⁹⁹. Maximum quantities handled for the purpose of injection were approximately 15 to 20 millicuries. I personally did not milk the generators. Examinations performed were standard brain scans, cerebral flow and imaging, lung, liver scans, etc.
- Summer 1981 -O.S.H.A. training course (Argonne National Laboratory) Millicurie and microcurie amounts of Cobalt⁶⁰ and cesium in the form of sealed sources were handled. Sources were given as unknowns, and the class was to use different scintillators to identify the isotope from its energy curve.
- Fall 1981 -REECO - Emergency response training for radiation accidents. Millicurie amounts of cobalt⁵⁷ were used to teach use of radiation detection and measurement equipment. Microcurie amounts of an unknown isotope were used during decontamination exercises.

ADDITIONAL EXPERIENCE

My particular job requires that I am available to investigate incidents involving radioactive material and occasionally pick-up and transport of radioactive material for disposal by our department. I recently picked up a microcurie amount of radium²²⁶ for proper disposal by this department. This type of circumstance is not uncommon.