

AD-A151 009 MIXED VALENCE MATERIALS(U) VERMONT UNIV BURLINGTON DEPT 1/1
OF CHEMISTRY W E GEIGER 1985 N00014-82-K-0289

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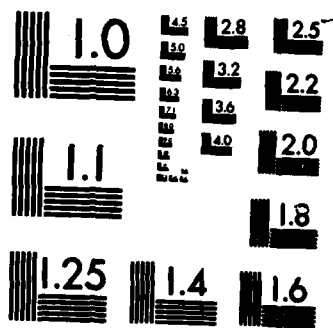
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Spectroscopic and Magnetic Studies of a Mixed-Valence Iron Fluoride, Fe2F5.2H2O were carried out. The Structure of a Mixed-Valence Iron Fluoride FeF2H2O was determined. Magnetic Exchange in a Chloride- and Adeninium-Bridged Linear Trimer of Copper (II)-Octachlorobis-(adeninium) tricopper (II) Tetrahydrate was effected. Originator Supplied Keywords include,		

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The University of Vermont

DEPARTMENT OF CHEMISTRY
COOK PHYSICAL SCIENCE BUILDING
BURLINGTON, VERMONT 05405
(802) 656-2594



~~February~~ 4, 1985

~~FEB~~ 8 1985

Dr. Ken Wynne
Chemistry Division Code 413
Research Programs
Office of Naval Research
800 North Quincy Street
Arlington, VA 22217

Dear Ken:

I understand from talking with Chris Allen that your office would like to obtain some information about Contract N00014-82-K-0289, for which the late David B. Brown was principal investigator. I have looked through Dave's files and to the best of my information and recollection, tried to pull together on the enclosed sheets the requested information on personnel and publications. If there are any further questions, please give me a call.

Sincerely,

Bill

William E. Geiger Jr.
Professor of Chemistry

WEG/jms

cc: Mike Kelly
Steve Stoddard

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A) Personnel

- 1) Graduate students receiving Ph.D. who were supported by ONR

Dr. Erick Walton (1979)
Dr. Chester T. Dziobkowski (1979)
Dr. Barry Cushman (1979)

- 2) Postdoctoral associates supported by ONR

Dr. David Anderson
Dr. Zbigniew Peplinski
Dr. Fritz Wenk
Dr. James Wroblewski

B) Publications

"Spectroscopic and Magnetic Studies of a Mixed-Valence Iron Fluoride, $\text{Fe}_2\text{F}_5 \cdot 7\text{H}_2\text{O}$," E.G. Walton, P.J. Corvan, D.B. Brown, and P. Day, Inorg. Chem. 15, 1737 (1976).

"Magnetic Exchange Interaction in the Chloro-Bridged Copper (II) Complex $\text{N,N,N}',\text{N}'$ -tetramethylethylenediammonium Hexachlorodocuprate (II)," D.B. Brown, J.W. Hall, M.R. Scott, and W.E. Hatfield, Inorg. Chem. 16, 1813 (1977).

"Standards for Magnetic Measurements. A Comparison and a Proposal for the Use of Tetramethylethylenediammonium Tetrachlorocuprate (II)," D.B. Brown, V.H. Crawford, J.W. Hall, and W.E. Hatfield, J. Phys. Chem. 81, 1303 (1977).

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"Preparation, Magnetic Susceptibilities, and Mossbauer Spectra of Dimeric and Polymeric Iron Complexes with Dihydroxybenzoquinones," J.T. Wroblewski and D.B. Brown, *Inorg. Chem.*, 18, 498 (1979).

"Interaction of Hydrazine with Copper (II) Chloride in Acidic Solutions. Formation, Spectral and Magnetic Properties, and Structures of Copper (II), Copper (I), and Mixed-Valence Species," D.B. Brown, J.A. Donner, J.W. Hall, S.R. Wilson, R.B. Wilson, D.J. Hodgson, and W.E. Hatfield, *Inorg. Chem.* 18, 2635 (1979).

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"Physical and Chemical Properties of Squarate Complexes. II. Mossbauer Spectroscopy and Magnetic Susceptibility Studies of Several Dimeric and Trimeric Iron (III) Complexes Containing the Squarate Dianion," J.T. Wroblewski and D.B. Brown, *Inorg. Chim. Acta* 35, 109 (1979).

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"Reanalysis of the Thermal, Magnetic, and Spectra Properties of $\text{Cr}_3\text{O}(\text{CH}_3\text{COO})_6(\text{H}_2\text{O})_3\text{Cl}\cdot 6\text{H}_2\text{O}$ on the Basis of an Intercluster Spin-Exchange Model," J. T. Wroblewski, C. T. Dziobkowski, and D. B. Brown, Inorg. Chem. 20, 684 (1981).

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