DC WRRC Report No. 142

Directory of University Water Expertise in the District of Columbia

DC Water Resources Research Center
University of the District of Columbia

4200 Connecticut Ave., N.W. M.B. 5004
Washington, D.C. 20008

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CONTENTS

PREFACE i

EXPERTISE 1

Nature of Water 2
Water Cycle 2
Water Supply Augmentation 5
Water Quantity Management and Control 5
Water Quality Management and Protection 6
Water Resources Planning 11
Resources Data 13
Engineering Work 13
Manpower, Grants, and Facilities 14
Scientific, and Technical Information 15
International..... 16
Other 16

UNIVERSITIES 19

The American University 20
The Catholic University 21
The George Washington University 22
Georgetown University 24
Howard University 25
University of the District of Columbia 26

FACULTY INDEX 29

DIRECTORY UPDATE FORM 47

PREFACE

The DC Water Resources Research Center was established at the University-of the District of Columbia in 1973 under the Water Research and Development Act of 1964. The mission of the DC-WRRC is to provide the District of Columbia with interdisciplinary research support to identify DC water resources problems and to contribute to their solutions. In addition, the Center promotes training, technology transfer, and information dissemination on the water and water related resources of the District of Columbia.

The Directory of university water expertise in the District of Columbia is prepared as part of the DC-WRRC information dissemination program. The directory has been assembled for several purposes:

1. to identify as nearly as possible those faculty members of universities in the District of Columbia who are actively involved in one or more aspects of water resources/research;

2. to facilitate communication among faculty members with water expertise and interests, so that cooperation and collaboration can be maximized;

3. to stimulate exchange of information between faculty members, public agencies and private organizations with interest and/or responsibility in the field of water resources; and

4. to inform interested parties of the active role that faculty members at D.C. universities are playing in the area of water resources research.

Although we contacted a wide range of people, it is inevitable that some sources were overlooked. Those who wish to be included in the next edition should fill out the Directory Update Form on page forty eight and return it to us.

The compilation of this directory was carried out by Joseline Castanos of the DC-WRRC staff. Special thanks go to faculty members who responded and made it possible for the Center to achieve its goal of compiling and publishing this directory.

Dr. M.H. Watt
Director

EXPERTISE

This section on expertise is organized according to the focus categories (Categories Of Water Resources Research), of the U.S. Department of Interior. The categories include several fields of water resources. Under each field, names of the faculty are provided.

If you know the type of information you need, but do not know who has that information, begin your search with this section. The broad categories will lead you to the contact person who can answer your specific question. More information on the contact is provided in the section II: universities (pages 19 to 26) and in the section III: faculty index (pp 29-46).

NATURE OF WATER

Properties of Water

Alexander,B.
Dey , B.
Jones , A. J.
Meijer, P.
Perros, T.
Shalaby, A.I.
Spoon, D.

Aqueous- Solutions and Suspensions

Caress,E.A.
Earley,J.
Eng. G.
Girard, J.
Logan, W.
Perros, T.
Schmidt, W.E.
Siegel, F.
Wyche G.

WATER CYCLE

General

Brooks, C.
Dey, B.
Haque, M.
Jones, A. J.
Meijer, P.
O'Connnor, J.
Perros, T.
Shalaby, A.I.
Siegel, F.
Siegenthaler, J.
Spoon, D.
Vermeer, D.E.
Wyche, G.
Young, G.K.

Precipitation

Chang, F.
Dey , B.
O'Connor, J.
Shalaby,A.I.
Vermeer, D.E.

Snow,Ice, and Frost

Dey , B.
Haque , M.
Kakovitch , T.

Evaporation and Transpiration

Haque, M.
Spoon, D.
Viterito, A.
Wilkins, A.

Streamflow and Runoff

Chang, F.
Dey, B.
Haque, M.
Mahmood, K.
O'Connor, J.
Pao, H.
Schneider
Shalaby, A.I.
Spoon, D.
Vermeer, D.E.
Watt, H.M.
Yang, T.
Young G.K.

Groundwater

Back, W.
Caress, E.A.
Dey, B.
Haque, M.
Logan, W.
Meijer, J. O'
Connor, J.
Pao, H.
Schmidt, W.E.
Schneider
Shalaby, A.I.
Vermeer, D.E,
Young, G.K.

Water in Soils

Haque , M.
Pao, H.
Shalaby.A.I.
Wilkins, A.

Lakes

Haque, M.
Pao, H.
Spoon, D.
Young, G. K.

Water in Plants

Haque, M.
Wilkins, A.

Erosion and Sedimentation

Chang, F.
Mahmood, K.
Merchant, H.
O'Connor, J.
Vermeer, D.E.

Chemical Processes

Back, W.
Caress, E.A.
Haque, M.
Logan, W.
Perros, T.
Schmidt, W.E.
Siegel, F.
Wade, c.

Estuaries

Banta, W.
Haque, M.
Kao, T.
Knowlton, R.
O'Connor , J.
Phelps , H.
Spoon , D.
Young , G. K.

Nutrient Cycling

Carson, F.
Elhelu, M.
Haque, M.
Merchant, H.
Richardson, J.
Spoon, D.
Young, G.K.

WATER SUPPLY AUGMENTATION AND CONSERVATION

Saline Water Conservation

Jones, A. J.

Water Yield Improvement

Siegenthaler, J. Young, G.K.

Use of Water of Impaired Quality

Blackman, D.

Conservation in Domestic and Municipal use

Chawla, R.
Watt, H.M.
Young, G. K.

Conservation in Industrial Use

Alexander, B.
Pao, H.

WATER QUANTITY MANAGEMENT AND CONTROL

Control of Water on the Surface

Lieber, H.
Mahmood, K.
O'Connor, J.
Schmidt, W.E.
Schneider, J.
Siegel, F.
Siegenthaler, J.
Spoon, D.

Groundwater Management

Caress, E.A. Dey,
B. Logan, W.
O'Connor, J.
Schmidt, W.E.
Schneider, J.
Shalaby, A.I.
Vermeer, D.E.
Wade, C. Watt,
H.M. Young, G.K.

Effects on Water of Man's Non-Water Activities

Dey, B.
Eng, G.
Guerrero, V.
O'Connor, J.
Schmidt, W.E.
Schneider, J.
Siegel, F.
Siegenthaler, J.
Watt, H.M.
Young, G. K.

Watershed. Protection
Dey, B.
Guerrero. V.
Mahmood, K.
O'Connor, J.
Schneider, J.
Shalaby, A.I.
Siegel, F.
Siegenthaler, J.
Watt, H.M.
Young, G.K.

WATER QUALITY MANAGEMENT AND PROTECTION

Identification of Pollutants

Alexander, B.
Caress, E.A.
Carson, F.
Chawla, R.
Cheh, A.
Choi, Y.
Earley, J.

Eng, G.
Girard, J.
Jones, A. J.
Kakovitch, T.
Knowlton, R.
Lee, Y.
Montaser, A.
Perros, T.
Phelps, H.
Schmidt, W.E.
Siegel, F.
Spoon, D.
Wade, C.
Young, G.K.

Heavy Metals

Caress, E.A.
Chawla, R.
Cheh, A.
Choi, Y.
Earley , J.
Elhelu, M.
Eng, G.
Girard, J.
Knowlton, R.
Lee, Y.
Montaser, A.
Ocran, K.
Packer, R.
Perros, T.
Phelps, H.
Posey, I.
Preer, J.
Schmidt, W.E.
Siegel, F.
Spoon, D.

Toxic and Hazardous Wastes

Alexander, B.
Back, W.
Chawla, R.
Chi, M.
Choi, Y.
Elhelu, M.
Eng, G.
Girard, J.
Johnson, J.
Lee, Y.
Lieber, H.
May, L.

Nardone, R.
Ocran, K.
Perros, T.
Phelps, H.
Schmidt, W.E.
Siegel, F.
Spoon, D.
Wade, C.

Sources of Pollution

Alexander, B.
Back, W.
Chawla, R.
Choi, Y.
Dey, B.
Elhelu, M.
Kao, T.
Lee, Y.
Logan, W.
Montaser, A.
O'Connor, J.
Ocran, K.
Perros, T.
Phelps, H.
Preer, J.
Schmidt, W.E.
Schneider, J.
Siegel, F.
Spoon, D.
Young, G.K.

Transport of Pollutants

Alexander, B.
Blackman, D.
Logan, W.
Montaser, A.
Perros, T.
Phelps, H.
Schneider, J.
Wade, C.

Fate of Pollutants

Black, W.
Blackman, D.
Chawla, R.
Cheh, A.
Earley, J.
Eng, G.
Kakovitch, T.

Lee, Y.
Logan, W.
May, L.
Merchant, H.
Pao, H.
Perros, T.
Phelps, H.
Posey, I.
Preer, J.
Siegel, F.
Spoon, D.
Wade, C.
Young, G.K.

Effects of Pollution

Alexander, B.
Back, W.
Blackman, D.
Chawla, R.
Cheh, A.
Dey, B.
Hufford T.
Kakovitch, T.
Kao, T.
Knowlton, R.
Lee, Y.
Merchant, H.
Ocran, K.
Packer, R.
Phelps , H.
Schmidt, W.E.
Siegel, F.
Siegenthaler, J.
Spoon, D.
Sze, P.
Young, G. X.

Environmental Acidification

Alexander, B.
Jones, A.J.
Merchant, H.
Packer, R.
Siegel, F.
Spoon, D.

Waste Treatment Processes

Chang, F.
Chawla, R.
Choi, Y.

Johnson, J.
Richardson, J.
Schmidt, W.E.
Spoon, D.
Watt, H.M.
Yang, T.
Young, G.K.

Ultimate Disposal of Wastes

Chawla, R.
Choi, Y.
Johnson, J.
Siegel, F.
Siegenthaler, J.
Spoon, D.
Wrathall, C.R.
Young, G.K.

Water Purification

Blackman, D.
Chawla, R.
Cheh, A.
Girard, J.
Reich, M.
Spoon, D.

Water Treatment and Distribution

Chawla, R.
Johnson, J.
Kakovitch, T.
Siegenthaler, J.
Spoon, D.
Watt, H.M.
Yang, T.

Water Ouality Control

Azani, H.
Banta, W.
Blackman, D.
Carson, F.
Chi, M.
Choi, Y.
Girard, J.
Hufford, T.
Johnson, J.
Jones, A.J.
Lee, Y.
Lieber, H.

Montaser, A.
Phelps, H.
Richardson, J.
Shalaby, A.I.
Spoon, D
Young G. K.

Agricultural Waste Management

Azani, H.
Dey, B.
Johnson, J.
Lee, Y.
Siegel, F.

Non-Point Source Pollution Control

Choi, Y.
Dey, B.
O'connor, J.
Phelps, H.
Sager, M.
Schneider, J.
Spoon, D.
Young, G.K.

WATER RESOURCES PLANNING

Techniques of Planning

Azani, H.
Choi, Y.
Dey, B.
Levinson, N.
Lieber, H.
O'connor, J.
Richardson, J.
Waters, R.
Watt, H.M.
Young, G.K.

Evaluation Process

Azani, H.
Choi, Y.
Dey, B.
Hufford, T.
Levinson, N.
Lieber, H.
Siegenthaler, J.
Spoon, D.

Waters, R.
Young, G. K.

Cost. Allocation, Cost Sharing, Pricing/Repayment

Azani, H.
Choi, Y.
Holman, M.
Lieber, H.
Siegenthaler, J.
Waters, R.
Young, G. K.

Water Demand

Choi, Y.
Holman, M.
Lieber, H.
Waters, R.
Watt, M. H.
Young, G. K.

Water Law and Institutions

Choi, Y.
Hannaham, J.
Holman, M.
Lieber, H.
O'Connor, J.
Reitze, A.
Siegenthaler, J.

Nonstructural Alternatives

Choi, Y.
Lieber, H.
Siegel, F.
Watt , M. H.

Ecologic Impact of Water Development

Choi, Y.
Dey, B.
Jones, A. J.
O'Connor, J.
Siegenthaler, J.
Spoon, D.
Vermeer, D.E.

RESOURCES DATA

Network Design

Johnson, J.
Mahmood, K.
Schneider, J.
Shalaby, A.I.
Viterito, A.
Yang, T.
Young, G.K.

Data Acquisition

Caress, E.A.
Chi, M.
Guerrero, V.
Hufford, T.
Mahmood, K.
Schmidt, W.E.
Schneider, J.
Shalaby, A.I.
Young, G.K.

Evaluation. Processing, and Publication

Levinson, N.
Mahmood, K.
Schneider, J.

ENGINEERING WORKS

Structures

Chi, M.
Haque, M.
Jones, I.
Kakovitch, T.
Mahmood, K.
Siegel, F.
Yang , T.

Hydraulics

Chang, F.
Chi, M.
Haque, M.
Johnson, J.
Kakovitch, T.
Kao, T.

Mahmood, K.
Pao, H.
Shalaby, A. I.
Watt , M. H.
Yang , T.

Soil Mechanics

Chi, M.
Jones, I.
Mahmood, K.
Pao, H.

Rock Mechanics and Geology

Jones, I.
O'Connor, J.
Siegel, F.

Concrete

Chi, M.
Jones, I.
Yang, T.

Materials

Chi, M.
Jones, I.

Fisheries Engineering

Jones, A. J.
Mahmood, K.

MANPOWER, GRANTS, AND FACILITIES

Education - Extramural

Choi, Y.
Dey, B.
O'Connor, J.
Perros, T.
Schmidt, W.E.
Shalaby, A.I.

Education - In-house

Banta, W.
Choi, Y.
Dey, B.

Johnson, J.
Jones, A.J.
O'Connor, J.
Perros, T.
Shalaby, A,I.

Research Facilities

Banta, W.
Choi, Y.
Dey, B.
Johnson, J.
Perros, T.
Shalaby, A.I.
Watt, H.M.

Grants. Contracts, and Research Act Allotments

Choi, Y.
Dey, B.
Hannaham, J.
Johnson, J.
Schneider, J.
Wade, C.
Watt, H.M.

SCIENTIFIC AND TECHNICAL INFORMATION

Acquisition and Processing

Chawla, R.
Chi, M.
Dey, B.
Perros, T.
Schneider, J.

Reference and Retrieval

Chawla, R.
Chi, M.
Dey, B.
Levinson, N.

Knowledge Transfer

Azani, H
Chawla, R.
Chi, M.
Dey, B.
Earley, J.
Hannaham, J.

Levinson, N.
Mahmood, K.
O'Connor, J.
Watt, H.M.
Young, G.K.

Secondary Publication and Distribution

Chawla, R
Chi, M.
Dey , B.
Hannaham, J.

Specialized Information Center Services

Azani, H

Preparation of Reviews

Azani, H.
Dey, B.

INTERNATIONAL

Engineering

Johnson, J.
Shalaby A.I.

Socio/Economic

Azani, H
Choi, Y
Dey, B.
Phelps, H.

Legal

Choi, Y
Hannaham, J.

OTHER

Aquaculture
Jones, A. J.

Dredging
Wrathall, C.R.

Ecology - Asia

Guerrero, V.

Hydraulics Modeling

Mahmood, K.

Industrial Wastes

Schmidt, W.E.
Wrathall, C.R.

Institution Building

Hannaham, J.

Ocean Heat Transport and its Influence on Climate
Gilheaney, J.

Pathogenic Bacteria
Wrathall, C.R.

Research on Pollution in Marine & Estuarine Systems
Phelps, H.

River Basin Development
Watt, H.M.

Sewage Sludge

Wrathall, C.R.

Social Impact of Water Problems and Engineering Works

Watt, H. M.

Theory and Physical Properties of Water

Meijer, p.

Thermal Energy Aquifer Storage
Pao,H.

Training Assistance

Hannaham, J.

Transfer Assessment of Technology

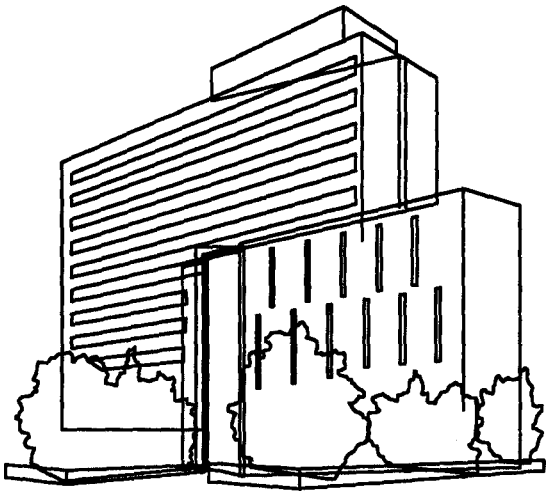
Azani, H.

Water Use in Energy Production

Watt, H. M.

UNIVERSITIES

This section presents a brief description of the universities in the District of Columbia where water resources expertise can be found. The researchers who responded to the questionnaire are listed under their university departments. For details about a researcher's expertise, refer to the section on the faculty index (pages 29 to 46).



THE AMERICAN UNIVERSITY

The American University is a comprehensive university located
at: 4400 Massachusetts Avenue, N.W.
Washington, D.C. 20016.

Chartered in 1891 and incorporated by Act of Congress in 1893, the university was founded as a Methodist-related graduate school of history and public affairs. Today American University offers a wide range of graduate and undergraduate degree programs, non-degree study as well through its five major divisions: the College of Arts and Sciences; the School of Public Affairs; Kogod College of Business Administration; and Washington College of Law. The faculty expertise of American University in Water Resources can be found in the departments listed below:

BIOLOGY DEPARTMENT
Mailing address: same as above
(202) 885-2176

William C. Banta
C. Richard Wrathall

CHEMISTRY DEPARTMENT
Mailing address: same as above
(202) 885-1750

Benjamin H. Alexander
Frederick W. Carson
Albert Cheh
James E. Girard

MATHEMATICS & STATISTICS DEPARTMENT
Mailing address: same as above
(202) 885-3120

R. W. Jernigan

SCHOOL OF PUBLIC AFFAIRS, DEPT. OF PUBLIC ADMINISTRATION
Mailing address: same as above
(202) 885-2375

Harvey Lieber

SCHOOL OF INTERNATIONAL SERVICE
Mailing address: same as above
(202) 885-1600

John M. Richardson, Jr.
Nanette S. Levinson

SOCIOLOGY DEPARTMENT
Mailing address: same as above
(202) 885-2474

Jurg K. Siegenthaler

THE CATHOLIC UNIVERSITY OF AMERICA

The decision to find the Catholic University of America was made by the bishops of the United States in December 1884.
It is located at: Michigan Avenue & Fourth Street, N.E. Washington, D.C. 20064.

The schools of the university are: School of Arts and Sciences; School of Engineering and Architecture; The Columbus School of Law; School of Library and Information Science; School of Nursing; School of Philosophy; School of Religious Studies; National Catholic School of Social Service.

The faculty expertise of Catholic University in water resources can be found in the departments listed below:

BIOLOGY DEPARTMENT

Mailing address: Biology Bldg. Washington, D.C. 20064
(202) 319-5267

Roland M. Nardone

CHEMISTRY DEPARTMENT

Mailing address: McCort-Wade Hall Washington, D.C. 20064
(202) 319-5385

Leopold May

CIVIL ENGINEERING DEPARTMENT
Mailing address: Pangborn Bldg. Washington, D.C. 20064
(202) 319-5163

Timothy W. Kao Hsieng-Ping Pao G. Kenneth Young

MECHANICAL ENGINEERING DEPARTMENT
Mailing address: Pangborn Bldg. Washington, D.C. 20064
(202) 319-5170

John J. Gilheaney

PHYSICS DEPARTMENT
Mailing address: Shahan Hall Washington, D.C. 20064
(202) 319-5315

Paul H. E. Meijer

THE GEORGE WASHINGTON UNIVERSITY

The George Washington University had its beginning in 1821 as The Columbian College in the District of Columbia. The name of the institution was changed in 1873 to Columbian University and in 1904 to The George Washington University, which now includes nine colleges, schools, and divisions, as follows: Columbian College of Arts and Sciences; The Graduate School of Arts and sciences; The School of Medicine and Health Sciences The National Law Center; The School of Engineering and Applied Science; The School of Education and Human Development; The School of Government and Business Administration; The School of International Affairs; The Division of Continuing Education.

The George Washington University is located at 21st St. and I St. N.W., Washington, D.C. 20052.

The faculty expertise of George Washington University can be found in the departments listed below:

BIOLOGICAL SCIENCES DEPARTMENT
Mailing address: 2023 G St. NW Washington, D.C. 20052
(202) 994-6090

Terry L. Hufford Robert E. Knowlton Henry Merchant Randall K. Packer

CIVIL, MECHANICAL, AND ENVIRONMENTAL ENGINEERING
Mailing address: 725 23rd St.
Washington, D.C. 20052 (202) 994-6749

Muhammad I. Haque Khalid Mahmood

CHEMISTRY DEPARTMENT

Mailing address: 725 21st St. NW Washington, D.C. 20052
(202) 994-6487

Akbar Montaser Edward A. Caress

Theodore P. Perros

William E. Schmidt

ECONOMICS DEPARTMENT

Mailing address: 2201 G St. NW Washington, D.C. 20052
(202) 994-6150

Mary A. Holman

ENGINEERING MANAGEMENT
Mailing address: 725 23rd St. Washington, D.C. 20052
(202) 994-7409

Robert C. Waters

GEOGRAPHY DEPARTMENT

Mailing address: 619 21st St.NW, Rm. 202 Washington, D.C. 20052
(202) 994-6185
Arthur Viterito Donald E. Vermeer

GEOLOGY DEPARTMENT

Mailing address: 2029 G St. NW Bell Hall Rm. 102
Washington, D.C. 20052 (202) 994-6190

William Back William Logan Frederic R. Siegel

MICROBIOLOGY DEPARTMENT
Mailing address: 2300 Eye St. Washington, D.C. 20052
(202) 994-2907

Melvin Reich

SCHOOL OF LAW

Mailing address: 720 20th St. Washington, D.C. 20052
(202) 994-6260

Arnold W. Reitze

GEORGETOWN UNIVERSITY

Georgetown University, established in 1789 by the first Catholic Bishop of the United States, is composed of four graduate and profession4l schools - Law, Medicine, Dentistry, and the Graduate School - and five Undergraduate Schools - the College of Arts and Sciences, the Schools of Foreign Service, Nursing, Business Administration, and Languages and Linguistics. At the present writing, Georgetown is a co-educational University of somewhat less than 10,000 students.

The Georgetown University address is: Washington, D.C. 20057.
The faculty expertise of George Washington University in water resources can be found in the departments below:

BIOLOGY DEPARTMENT
Mailing address: Reiss Science Bldg. 37th & 0 St. NW
Washington, D.C. 20057 (202) 687-6247

Donald Spoon Philip Sze

CHEMISTRY DEPARTMENT
Mailing address: Reiss Science Bldg. 37th & 0 St. NW
Washington, D.C. 20057 (202) 687-6073

Joseph E. Earley

HOWARD UNIVERSITY

The founding of Howard University can be traced back to a meeting of ten members of the First Congregational Society of Washington in November 1866. The Howard University is a predominantly minority institutional education system. It is one of the Historically Black Colleges and Universities.

Howard students, numbering approximately 12,500, come from all over the nation and more than 90 countries. The schools and colleges of the university are; College of Allied Health Services; School of Architecture and Planning; School of Business and Public Administration; School of Communications; College of Dentistry; Divinity School; School of Education; School of Engineering; College of Fine Arts; Graduate School of Arts and Sciences; School of Human Ecology; School of Law; College of Liberal Arts; College of Medicine; College of Nursing; College of Pharmacy and Pharmaceutical Sciences; School of Social Work.

The address is at: 2400 6th St. N.W. Washington, D.C. 20059.

The faculty expertise of Howard University in water resources can be found in the departments listed below:

CHEMICAL ENGINEERING DEPARTMENT
Mailing address: 2300 6th St, NW Washington, D.C. 20059
(202) 806-6624

Ramesh Chawla

CIVIL ENGINEERING DEPARTMENT
Mailing address: 2300 6th St. NW Washington, D.C. 20059
(202) 806-6570

James H. Johnson, Jr.

Irving W. Jones

Ahlam I. Shalaby

GEOLOGY & GEOGRAPHY DEPARTMENT
Mailing address: P.O. Box 1098 Washington, D.C. 20059
(202) 806-6926

Balaram Dey

UNIVERSITY OF THE DISTRICT OF COLUMBIA

The University of the District of Columbia resulted from the consolidation of the three institutions of higher education in the District of Columbia in 1976. These institutions were: the Federal City College, the D.C. Teachers College, and the Washington Technical Institute. UDC is predominantly minority institution. It is one of the Historically Black Colleges and Universities. It is the Land Grant University of the District of Columbia. UDC has five academic colleges: Business and Public Management; Education and Human Ecology; Liberal and Fine Arts; Life Sciences; and Physical Science, Engineering and Technology. It is located at: 4200 Connecticut Avenue, N.W.Washington, D.C. 20008.

The faculty expertise of UDC in water resources can be found in the departments listed below:

BIOLOGY DEPARTMENT

Mailing address:
4200 Connecticut Ave. NW, MB 0301
D.C. 20008
(202) 282-7364

Location:
Bldg. 03, Room 102 Washington,
1321 H Street, N.W.

Hariette L.Phelps
Gloria Wyche

BUSINESS & PUBLIC MANAGEMENT DEPARTMENT

Mailing address:
4340 Connecticut Ave. NW,
Rm. 504 Washington, D.C. 20008
(202) 282-3718

Location:

Hossein Azani
Yearn H. Choi

CHEMISTRY DEPARTMENT

Mailing address
4200 Connecticut Ave. NW, MB 0302
Washington, D.C. 20008
(202) 727-2712

Location:
Bldg. 03, Rm 304
1321 H St. NW

David Blackman
George Eng
Isadora J. Posey
Clarence W. R.

CIVIL ENGINEERING DEPARTMENT

Mailing address:

4200 Connecticut Ave. NW, MB 4202
D.C. 20008
(202) 282-7349
Fred M. Chang Tony S.Yang

Location:

Bldg. 42, Rm. 112 Washington,

ENVIRONMENTAL SCIENCE DEPARTMENT

Mailing address:

4200 Connecticut Ave. NW, MB 4404
D.C. 20008
(202) 282-7370

Elhelu Mohamed A.
Victoria Guerrero.
Albert Jose Jones
Thomas Kakovitch
James O'Connor
James R. Preer
Allen H. Wilkins

Location:

Bldg. 44, Rm. 218D Washington,

FOOD SCIENCE DEPARTMENT

Mailing address:
4200 Connecticut Ave. NW, MB 4404
Washington, D.C. 20008
(202) 282-7380

Yuen-Sen Lee

Location:
Bldg. 44, Rm. 203M

MECHANICAL ENGINEERING DEPARTMENT

Mailing address:
4200 Connecticut Ave. NW, MB 4202
Washington, D.C. 20008
(202) 282-3500

Calvin Brooks

Location:
B1dg.42,Rm. 112 I

WATER RESOURCES RESEARCH CENTER

Mailing address:
4200 Connecticut Ave. N.W. MB 5004
Washington, D.C. 20008
(202) 673-3442

Fred Chang
George Eng

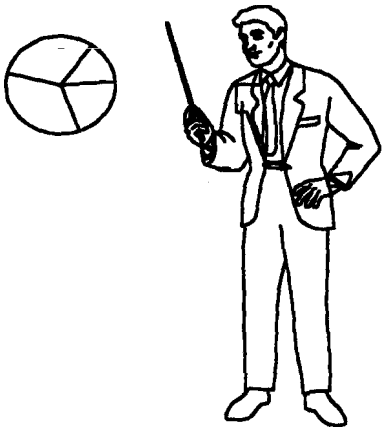
Location:
2565 Georgia Ave. N.W. Rm.206
Washington. D.C. 20059

James Girard *
V. Guerrero
Leopold May *
Clarence Wade*
M.H. Watt
James Hannaham
Jutta Schneider
Mohamed Yusuf
Joseline Castanos
James O'Connor*

* Research Agreement with the D.C. Water Resources Research Center.

FACULTY INDEX

The index alphabetically lists each person mentioned in the directory and includes the person's title, address, telephone number and expertise. The page numbers beside each name tell you where to find more information on the person. The investigators recently involved in Center's projects are listed. others are no longer affiliated with the Center or have left the universities they were faculty members. The information provided is extracted from the questionaires, but key elements might have been missed. For more complete information, it is advisable to contact the faculty member/ investigator.



A

ALEXANDER, Dr. Benjamin H. pages: 2,5,6,7,8,9,20,
Research Professor
Chemistry Department
The American University
Mass. Ave. & Nebraska Ave. NW
Washington, D.C. 20016
(202) 526-3577
Fresh and salt water ecology.

AZANI, Dr. Hossein pages: 10,11,12,15,16,18,26
Associate Professor
Business & Public Management
Department University of the District of Columbia
900 F St. NW
Washington, D.C. 20004 (202) 727-2700

Water resource planning; evaluation and control; public policy, cost/benefit analysis.

B

BACK, Dr. William pages: 3,4,7,8,9,2
Adjunct Professor
Geology Department
George Washington University
Washington, D.C. 20052
(703) 648-5856
Hydrogeology; chemistry of water; regional flow systems; Karst hydrology.

BANTA, Dr. William C. pages: 4,10,14,15,20
Professor
Biology Department
The American University
Washington, D.C. 20016
(202) 885-2181
Invertebrate zoology, especially of the Bryozoa. Also water chemistry, water quality, plankton.

BLACKMAN, Dr. David pages: 5,8,9,10,26
Professor, Chemistry Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 727-2280

Application of biochemical and molecular biological techniques to problems of water quality.

BROOKS, Calvin pages: 2,27
Professor, Mechanical Engineering Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7349

Hydraulics systems; urban water problems.

C

CARESS, Dr. Edward Alan pages: 2,3,4,6,7,13,22
Professor
Chemistry Department
Academic Center, Room T212
George Washington University
Washington, D.C. 20052
(202) 994-8086
Chemistry.

CARSON, Dr. Frederick W. pages: 5,6,10,20
Associate Professor
Chemistry Department
The American University
Washington, D.C. 20016
(202) 885-1750
Enzymatic analysis of nutrients.

CHANG, Dr. Fred F.M. pages: 2,3,4,9,13,27
Professor & Chairman
Civil Engineering Department 4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7349

Hydraulics and hydrology, specialized in open channel flows and sedimentation/erosion. Highway drainage design.

CHAWLA, Dr. Ramesh C. pages:5,6,7,8,9,10,15,16,25
Associate Professor
Chemical Engineering Department Howard University
2400 6th St. NW Washington, D.C. 20059 (202) 636-6625

Disinfection of drinking water; chemistry and kinetics of chlorination; formation and removal of trihalomethanes in water; water conservation and management in industrial use; industrial wastewater treatment, recycle, and reuse; removal of organic pollutants from water via inert gas stripping and carbon adsorption.

CHEH, Dr. Albert pages: 6,7,8,9,10,20
Associate Professor
Chemistry Department
The American University
Washington, D.C. 20016 (202) 885-1772

Detection, quantification and identification of chlorine disinfection by products.

CHOI,Dr. Yearn Pages:6,7,8,9,10,11,12,14,15,16,26
Professor
Business & Public Management
Department University of the District of Columbia
Washington, D.C. 20008
(202) 727-2700

Public policy; environmental quality; Clean Water Act.

DEY, Dr. Balaram pages: 2,3,6,8,9,11,12,14,15,16,25
Professor
Department of Physics & History
Howard University
Washington, D.C. 20059
(202) 636-6926/6925

Remote sensing, water resources.

E

EARLEY, Dr. Joseph E. pages: 2,6,7,8,15,24
Professor & Chairman
Chemistry Department Georgetown
University 607 Reiss Bldg. Washington,
D.C. 20057 (202) 625-4065

Chromium chemistry; kinetics and mechanism of inorganic reactions in aqueous solutions (especially chromium, titanium, ruthenium)

ELHELU, Dr. Mohammed pages: 5,7,8,27
Professor
Environmental Science Dept.
University of the District of Columbia
4200 Connecticut Ave. NW,
Washington, D.C. 20008
(202) 282-7370

Water quality management and protection; hazardous and toxic wastes; heavy metals.

ENG, Dr. George pages: 2,7,8,26 Professor
Chemistry Department
University of the District of Columbia
1321 H St. NW
Washington, D.C. 20008
(202) 727-2280

Water chemistry; fate of Organotin pollutants.

GILHEANEY, Dr. John J. pages: 17,21
Chairman
Mechanical Engineering Department
The Catholic University
Washington, D.C. 20064
(202) 319-5170
Ocean acoustics, oceanography.

GIRARD, Dr. James E. pages: 2,7,10,20,28
Professor & Chairman
Chemistry Department
The American University
Washington, D.C. 20016
(202) 686-5514
Separation and quantification of inorganic ions in water; ion chromatography.

GUERRERO, Dr. Victoria pages: 6,13,17,27,28
Professor
Environmental Science Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7380
Biology; water quality; wildlife biology; parasitology; ecology; eco-system.

H

HANNAHAM, Mr. James pages: 12,15,16,17,28
Deputy Director
DC Water Resources Research Center
The University of the District of Columbia
4200 Connecticut Ave., N.W. MB 5004
Washington, D.C. 20008
(202) 673-3443
Policy and planning, technology transfer, oceanography.

HAQUE, Dr. Muhammad I. pages: 2,3,4,5,13,22
Associate Professor
Department of civil, Mechanical, and
Environmental Engineering.
George Washington University
The Academic Center
801 22nd St. NW, Suite T717
Washington, D.C. 20052
(202) 994-6749

Computational hydraulics, finite element method, hydraulic structures, hydraulic, hydraulic machinery, fluvial hydraulics.

HOLMAN, Dr. Mary A. pages: 12,23
Professor
Economics Department
George Washington University
Washington, D.C. 20052 (202) 676-6156

Economic policy.

HUFFORD, Dr. Terry L. pages: 9,10,11,13,22 Associate Professor
Biological Sciences Department George Washington University 2029 G St. NW
Washington, D.C. 20052 (202) 676-6989

Effect of pollutants on aquatic microflora; evaluation of water quality through diatom community analysis; algal identification and establishment of baseline algal flora.

J

JERNIGAN, R. W. Pages: 20 professor
Statistics Department
Mathematics & Statistics Department The American University Washington, D.C. 20016
(202) 885-3100

Water resource and eutrophication models.

JOHNSON, Dr. James H., Jr. pages: 7,10,11,13,15,16,25
Professor & Chairman
Civil Engineering Department Howard University
2300 6th St. NW Washington, D.C. 20059 (202) 636-6570

Wastewater treatment, sludge treatment and disposal and hazardous waste treatment and management. Specifically interested in solid-liquid separation processes.

JONES, Dr. Albert Josh pages: 2,5,7,9,10,12,14,15,16,25
Professor of Marine Science
Envi. Science Dept. University of D.C.
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-3078

Aquaculture; marine sciences; environmental microbiology; fisheries; recirculation of water sources used in agriculture and fish farming; estuaries; Anacostia River studies; international marine resources; scuba diving.

JONES, Dr. Irving W. pages: 13,14,25
Professor
Civil Engineering Dept.
Howard University
2300 6th St. NW
Washington, D.C. 20059
(202) 636-6395
Engineering works.

K

KAKOVITCH, Thomas pages:3,7,8,9,10,13,27
Associate Professor
Environmental Science Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7371
Fluid flow; water system design.

KAO, Dr. Timothy W. pages: 8,9,13,21
Professor & Chairman
Civil Engineering Department
The Catholic University
Washington, D.C. 20064
(202) 319-5163

Stratified flow; coastal and estuarine circulation and pollution transport. Geophysical fluid dynamics. Hydraulics.

KNOWLTON, Dr. Robert E. pages: 4,7,9,22
Associate Professor
Biological Sciences Department
George Washington University
Washington, D.C. 20052
(202) 994-6093

Analysis of effects of environmental factors (including pollutants) on decapod crustacea (especially larvae).

L

LEE, Dr. Yuen-Sen, Pages: 7,8,9,10,11,27
Associate Professor
Food Science Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7373

Heavy metals and fish contamination.

LEVINSON, Dr. Nanette S. pages: 11,13,15,16,20
Associate Professor
School of International Services
The American University
Washington, D.C. 20016
(202) 686-2513

Knowledge and technology transfer; policy issues.

LIEBER, Dr. Harvey Pages: 5,7,10,11,12,20
Associate Professor
School of Public Affairs Department of Public
Administration
The American University
4400 Massachusetts Ave. NW
Washington, D.C. 20016

(202) 885-6235

Management, administration and institutional aspects of water quality and toxic substances.

LOGAN, Dr. William pages: 2,3,4,6,8,9,23
Assistant Professor
Department of Geology
The George Washington University
Washington, D.C. 20052
(202) 994-0112

Ground water-Surface water interaction, wetland hydrogeology, regional coastal flow systems, water-rock interaction, saltwater intrusion.

M

MAHMOOD, Dr. Khalid pages: 3,4,5,6,13,14,17,22
Professor of Engineering
Civil, Mechanical & Environmental Engineering Dept. Director
International Center Resources Institute
The George Washington University
The Academic Center, Rm. T720
Washington, D.C. 20052
(202) 994-3793

Mechanics of sandbed channels; reservoir sedimentation; unsteady flow in open channels; sedimentation engineering; mathematical modeling.

MAY, Dr. Leopold pages: 7,9,21,28
Professor
Chemistry Department
The Catholic University of America
Washington, D.C. 20064
(202) 319-5392

Fate of Tributyltin in compounds in sediments and water using spectroscopy.

MEIJER, Dr. Paul H. E. pages: 2,3,17,22
Professor Emeritus
Physics Department
The Catholic University of America
Washington, D.C. 20064
(202) 319-5315
Water-models; theory and physical properties of water.

MERCHANT, Dr. Henry pages: 4,5,9,22
Associate Professor
Biological Sciences Department
The George Washington University
Washington, D.C. 20052
(202) 676-7123
Effects of water quality of organisms; effects of the iota upon water quality.

MONTASER, Dr. Akbar pages: 7,8,11,22
Associate Professor
Chemistry Department
George Washington University
Washington, D.C. 20052
(202) 994-6480
Trace analysis of water with inductively complete plasma-atomic emission spectroscopy and mass spectrometry.

N

NARDONE, Dr. Roland M. pages: 8,21
Professor
Biology Department
The Catholic University of America
Washington, D.C. 20064
(202) 319-5275
In vitro toxicity testing, especially neurotoxicity.

O'CONNOR, James V. pages: 2,3,4,5,6,8,11,12,14,15,16,27,28
Assoc. Prof. of Geoscience
Environmental Science Department
University of the District of Columbia
4200 Connecticut Ave. MB 44-04
Washington, D.C. 20008
(202) 282-7380
Urban ground water regime investigations; landform evolution along the fall zone; Anacostia drainage basin restoration; Potomac Valley history; coastal and urban geology.

OCRAN, Kwamena pages: 7,8,9,25
Assistant Professor
Civil Engineering Dept.
Howard University
2300 6th ST., NW.
Washington, D.C. 20059
health, ecological effects, environmental assessments, heavy metals, pesticides in water and soil.

P

PACKER, Dr. Randall K. pages: 7,9,22
Professor & Chairman
Biological Sciences Department
George Washington University
Washington, D.C. 20052
(202) 676-6977
Physiological effects of environmental pollutants on aquatic vertebrates, especially fish.

PAO, Dr. Hsien-Ping pages: 3,4,5,9,14,17,21
Professor
Civil Engineering Department
The Catholic University of America
Washington, D.C. 20064
(202) 319-5163
Fluid mechanics, density stratified flows, thermal plumes, ground water flows, selective withdrawal in lakes and reservoirs.

PERROS, Dr. Theodore P. pages: 2,4,7,8,9,14,15,23
Professor
Chemistry Department
George Washington University
Washington, D.C. 20052
(202) 994-6120

Chemistry of surface and ground waters.

PHELPS, Dr. Hariette L. pages: 4,7,8,9,11,16,17,26
Professor
Biology Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 727-2744

Pollution in estuarine and marine ecosystems, with special reference to toxics and their impact on shellfish and aquaculture.

POSEY, Dr. Isadora J. pages: 7, 9, 26
Professor
Chemistry Department
University of the District of Columbia
Washington, D.C. 20008
(202) 727-2280

Nature and extent of transformation which antifoulant organotin compounds undergo in water systems.

PREER, Dr. James R. pages: 7,8,9,27
Professor & Chairman
Environmental Science Department
University of the District of Columbia
Washington, D.C. 20008
(202) 282-7370

Heavy metals analysis; land application of sludge - heavy metal uptake by plants; chemical analysis of water quality.

REICH, Dr. Melvin pages: 10,23
Professor
Microbiology Department
George Washington University
Medical Center
2399 Eye St. NW
Washington, D.C. 20037
(202) 676-2907

Water purification (anti-microbial).

REITZE, Arnold W. pages: 12,23
Professor & Director of the Environmental Law Program
School of Law
George Washington University
Washington, D.C. 20052
(202) 676-6908

Water law; water pollution.

RICHARDSON, Dr. John M., Jr. pages: 5,10,11,20
Professor
School of International Service
The American University
Washington,D.C. 20016
(202)885-1600

Computer modeling/simulation;freshwater lakes.

S

SCHMIDT, William E. pages: 2,4,5,6,7,8,9,10,13,14,17,23
Professor
Chemistry Department
George Washington University Washington, D.C. 20052
(202) 994-6719

Chemistry,groundwater,heavy metals.

SCHNEIDER, Ms. Jutta pages: 3,5,6,8,11,13,15,28
Research Associate
DC Water Resources Research Center
The University of the District of Columbia
4200 Connecticut Ave., N.W. MB 5004
Washington, D.C. 20008
(202) 673-3443

Watershed management, groundwater and surface water, quality and quantity, pollution sources, human impacts and management.

SHALABY, Ahlam I. pages:2,3,4,6,11,13,14,15,16,25
Assistant Professor
Civil Engineering Department
Howard University
Washington, D.C. 20059
(202) 636-6624

Fluid mechanics, groundwater hydrology,computer modeling.

SIEGEL, Dr. Frederic R. pages:2,4,5,6,7,8,9,10,11,12,13,14,23
Professor
Geology Department Bell Hall
Rm. B02 2029 G St. NW
Washington, D.C. 20052
(202) 676-6194

Geochemistry; geology, water and health; land-use planning; wastes (industrial, agricultural, domestic).

SIEGENTHALER, Dr. Jurg K. pages:2,5,6,9,10,11,12,21
Professor
Sociology Department
The American University McCabe Hall 221
Washington, D.C. 20016
(202) 585-1429

Water management (use of water resources, prevention of water damages, and anti-water pollution measures) in the course of industrialization; methodologies in this area, especially long-term assessment.

SPOON, Dr. Donald pages:2,3,4,5,7,8,9,10,11,12,22,24
Assistant Professor
Biology Department
Georgetown University
Washington, D.C. 20057
(202) 625-4236

Aufwuchs (periphyton) community of the Potomac River.

SZE, Philip pages: 9,24
Associate Professor
Biology Department
Georgetown University
Washington, D.C. 20057
(202) 687-5828

Ecology of algae.

V

VITERITO, Dr. Arthur pages: 3,13,23
Assistant Professor
Geography Department
George Washington University
Washington, D.C. 20052
(202) 676-3966

Area measurement of precipitation, evapotranspiration models.

VERMEER, Dr. Donald E. pages: 2,3,4,6,12,23
Professor & Chairman
Department of Geography & Regional Science
George Washington University
Washington, D.C. 2005

(202) 994-6185

Water resources, precipitation, livestock management in sahalian West Africa.

W

WADE, Dr. Clarence W. K. pages: 4,6,7,8,9,15,21,28
Professor
Chemistry Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 727-2280

Identification of pollutants; toxic and hazardous wastes; transport of pollutants; fate of pollutants; grants, contracts, and research act allotments.

WATERS, Dr. Robert C. page: 11,12,23
Professor & Chairman
Engineering Management
George Washington University
Washington, D.C. 20052
(202) 994-7409

Economics of water projects.

WATT, Dr. Hame M. pages: 3,5,6,10,11,12,14,15,16,17,18,28
Director
Water Resources Research Center
University of the District of Columbia
4200 Connecticut Ave. NW MB 5004
Washington, D.C. 20008
(202) 673-3442

Fluid mechanics; hydraulics; water conservation; water resources planning; renewable energy resources; international development; ground water; education; training; grants.

WILKINS, Allen. pages: 3,4,27
Associate Professor
Environmental Science Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008

(202) 282-7380

Water quality; urban non-point sources.

WRATHALL, Dr. C. Richard pages: 10,16,17,20
Associate Professor
Biology Department
The American University
Washington, D.C. 20016 (202) 475-9395

Marine sediments; chemical and microbiological pollution; sewage, dredge material disposal.

WYCHE, Dr. Gloria pages: 2,26
Professor
Biology Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008
(202) 282-7364

YANG, Dr. Tony T. S. pages: 3,10,13,14,27
Professor & Chairman
Civil Engineering Department
University of the District of Columbia
4200 Connecticut Ave. NW
Washington, D.C. 20008 .
(202) 282-7349

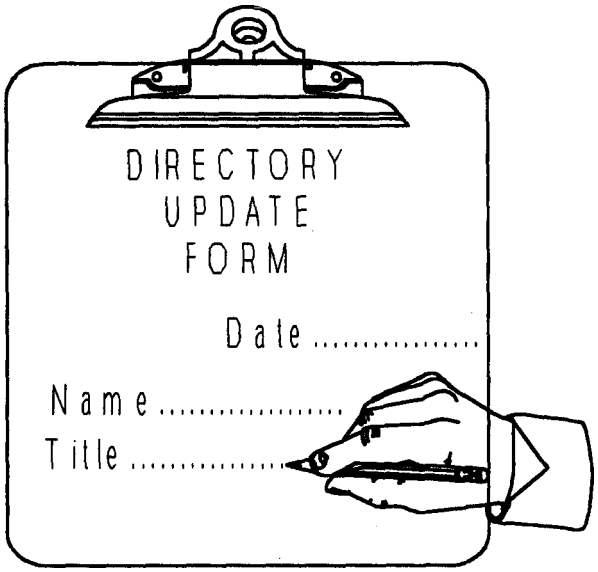
Engineering related areas, including design of dams, culverts and channels; water treatment and distribution.

YOUNG, Dr. G. Kenneth pages: 2,3,4,5,6,7,8,9,10,11,12,13,16,21
Adjunct Professor
Civil Engineering Department
The Catholic University of America
Washington, D.C. 20064

Computer analysis and optimization applied to mathematical models of hydrologic, hydraulic,meteorologic, and environmental system.

DIRECTORY _ UPDATE .FORM

Please, use the following form for any additions or corrections to the Directory.



UNIVERSITY WATER EXPERTISE DIRECTORY
DISTRICT OF COLUMBIA

Date:.....
Name.....
Title:.....
Department:.....
University/College:.....
Address:.....
Telephone:.....

Water related expertise/ interests

Please highlight your interests related to any aspect of water listed on the attached pages (2 and 3) of this form. We realize that it may be difficult to summarize your work in a short statement, but space is limited. Your statement may slightly be edited for format consistency.

Please indicate other colleagues/ faculty members who should be included , and their university affiliation.

Please also complete the next pages. Thank you.!

Return to:

Dr. H. M. Watt, Director

DC Water Resources Research Center, MB 5004 4200 Connecticut Ave. N.W.
Washington, D.C. 20008 Tel. (202) 673-3442

Kindly check the category or categories of your expertise.

01 NATURE OF WATER

[ ] A Properties of Water

[ ] B Aqueous Solutions and Suspensions

02 WATER CYCLE

[ ] A General
[ ] B Precipitation
[ ] C Snow, Ice, and Frost
[ ] D Evaporation and Transpiration
[ ] E streamflow and Runoff
[ ] F Groundwater
[ ] G Water in Soils
[ ] H Lakes
[ ] I Water in Plants
[ ] J Erosion and Sedimentation
[ ] K Chemical Processes
[ ] L Estuaries
[ ] M Nutrient Cycling

03 WATER SUPPLY AUGMENTATION AND CONSERVATION

[ ] A Saline Water Conservation
[ ] B Water Yield Improvement
[ ] C Use of Water of Impaired Quality
[ ] D Conservation in Domestic and Municipal use
[ ] E Conservation in Industrial Use
[ ] F Conservation in agricultural Use

04 WATER QUANTITY MANAGEMENT AND CONTROL

[ ] A Control of Water on the Surface
[ ] B Groundwater Management
[ ] C Effects of water of Mans' Non-water Activities
[ ] D Watershed protection

05 WATER QUALITY MANAGEMENT AND PROTECTION

[ ] A Identification of Pollutants
[ ] B Heavy Metals
[ ] C Toxic and Hazardous Wastes
[ ] D Sources of Pollution
[ ] E Transport of Pollutants
[ ] F Fate of Pollutants
[ ] G Effects of Pollution
[ ] H Environmental Acidification
[ ] I Waste Treatment Processes
[ ] J Ultimate Disposal of Wastes
[ ] K Water Purification
[ ] L Water Treatment and Distribution
[ ] M Water Quality Control
[ ] N agricultural Waste Management
[ ] O Non-Point Source Pollution Control

06 WATER RESOURCES PLANNING

[ ] A Techniques of Planning
[ ] B Evaluation Process
[ ] C Cost allocation, Cost Sharing, pricing/Repayment
[ ] D Water Demand
[ ] E Water Law and Institutions
[ ] F Nonstructural Alternatives
[ ] G Ecologic Impact of Water Development

07 RESOURCES DATA

[ ] A Network Design

[ ] B Bata Acquisition

08 ENGINEERING WORKS

[ ] A structures
[ ] B Hydraulics
[ ] C Hydraulic Machinery
[ ] D soil Mechanics
[ ] E Rock Mechanics and Geology
[ ] F concrete
[ ] G Materials
[ ] H Rapid Excavation
[ ] I Fisheries Engineering

09 MANPOWER, GRANTS, AND FACILITIES
[ ] A Education - intramural
[ ] B Education - In-house
[ ] C Research Facilities
[ ] D Grants, Contracts, and Research Act Allotments

10 SCIENTIFIC AND TECHNICAL INFORMATION

[ ] A Acquisition and Processing
[ ] B Reference and Retrieval
[ ] C Knowledge Transfer
[ ] D secondary Publication and Distribution
[ ] E Specialized Information Center Services
[ ] F Translations
[ ] G Preparation of Reviews

11 INTERNATIONAL

[ ] A Engineering
[ ] B Socio/Economic
[ ] C Legal
[ ] D Other (Specify)