

<u>Tentative Program of German Water</u> <u>Delegation</u>

Day 1 - Monday, November 24th

9:00 - Visit Shafdan site of Mekorot Water Company

http://www.mekorot.co.il/Eng/Pages/default.aspx



Mekorot is one of the world's most technologically advanced water companies. Seventy years of innovation in the face of Israel's significant environmental and security challenges have made Mekorot a world leader in desalination, water reclamation, water project engineering, water safety and water quality.

Through continual research, experimentation and field innovation, Mekorot provides a steady flow of clean water to a rapidly growing population despite the region's limited freshwater resources, arid climate and difficult geopolitical realities.

The Shafdan purification plant, which is responsible for the purification of wastewater from cities in the Dan region and its reuse for agricultural purposes, is one of the largest and most advanced of its kind in the world. Water purified at the plant is carried through the Third Pipeline to the Negev Region where it is used all forms of irrigation purposes. A tour of Shafdan includes a description of purification methods and transport to the Negev, as well as a movies and demonstration facilities. The tour requires approximately 1.5 hours.



<u>Lunch -hosted by Israel New tech - and the Israeli side of the Israel-German water working group</u>

http://www.israelnewtech.gov.il/

ISRAEL NEWTech (Novel Efficient Water Technologies) is a national program which was launched by the Ministry of Industry, Trade and labor in order to promote Israeli water technologies.

The program seeks to position Israel as a leading country in water technology by investing in human capital, R&D, infrastructure and marketing. ISRAEL NEWTech's goals are: doubling the export of Israeli water technology to \$2 billion by 2010, increasing foreign direct investment in Israeli water technology, and encouraging R&D through international cooperation

<u>Afternoon - Brokerage event at the Israel Export and International Cooperation Institute</u>

Overnight in Tel Aviv

Day 2 - Tuesday, November 25th

8:00 Drive to Netafim in Kibbutz Hatzerim

Netafim is the world's largest & leading company in the field of smart water solutions for agriculture.

Company's activity focuses on crop solutions in the area of drip-irrigation, turn key greenhouses projects & bio energy crops.

Netafim operates in more than 110 countries via 34 subsidiaries, with 13 factories throughout the world. The company employs 2,600 employees worldwide.

Netafim offers the following Water Treatments:

- Design, construction & operation of sea & brackish water desalination (RO based)
- Design, construction & operation of Waste Water Treatment plants (Conventional / Activated Sludge an MBR based technology)
- Deep Filtration systems (including chemicals treatments)
- Treated water for agricultural applications
- Livestock waste treatment
- Process & Detailed Design from raw water to plant irrigation
- Turn-Key & B.O.O.T. Water Treatments systems
- In-House full design & engineering & production



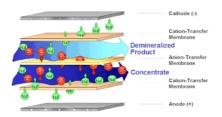
13:00 - Lunch

14:00 - Drive to Ben Gurion University of the Negev the Jacob Blaustein Institute for Desert Research (BIRD). Visit the Zuckerberg Institute of Water Research (ZIWR)

http://cmsprod.bgu.ac.il/Eng/units/bidr

http://web2.bqu.ac.il/ziwr/desalination/index.htm

ELECTRODIALYSIS (ED)





The Department of Desalination & Water Treatment (within the Zuckerberg Institute of Water Research) investigates various aspects of desalination and treatment of different kinds of water for recycling, including:

- Improvement and development of new membranes for reverse osmosis and nanofiltration in seawater desalination and treatment of various types of wastewater and urban effluents after tertiary treatment
- Development of novel ion-conducting membranes
- Pre-treatment of water by reverse osmosis
- Development of methods to eliminate organic substances from industrial effluents and polluted groundwater
- Understanding the mechanisms in low-pressure desalination systems associated with reverse osmosis and nanofiltration
- Improvement of materials used in reverse osmosis
- Development of management practice and methods to reduce concentrate volume
- Efficient techniques for reuse of urban effluents
- Improvement of electrodialysis processes for desalination of brackish water and for use in industry



Late Afternoon drive to the Dead Sea

Overnight at the Dead Sea







DAY 3 - Wednesday, November 26th

8:00- Drive to Ashkeolon to visit I.D.E Technologies desalination site

http://www.ide-tech.com/





Established in 1965, IDE Technologies Ltd. is internationally recognized as a pioneer and leader in the delivery of sophisticated water solutions. IDE is owned in equal shares by Israel Chemical Ltd. (ICL) and the Delek Group, both multi-national multi-discipline companies.

Since its inception in 1965, IDE has installed over 380 plants of various technologies and capacities in nearly 40 countries.

IDE develops designs, manufactures and installs sophisticated equipment for industrial and domestic applications throughout the world. Our equipment and plants are based on self-developed processes and state-of-the-art technology. In addition IDE provides post-sales maintenance and support for plants delivered to our customers.

A first large plant for desalination of seawater was recently completed on the Mediterranean coast, and is now producing 115 million cubic meters a year for potable water. Using the reverse osmosis process, this plant is generating water for about 60 cents per cubic meter.



<u>Drive to Jerusalem to visit Hagihon site – Jerusalem waste water & water corporation which uses technologies of 12 Israeli companies i.e.:</u>

The Gihon Company was founded by the Municipality of Jerusalem in the year 1996 and is operating as an independent cooperation.

The company is in charge of the development, extension, operation and maintenance of all the water supply, sewage, purification and drainage facilities of the city.

Here are three examples of technology being used by the Gihon:

IPNP

IPnP's Smart Grid Water Management solution.

- Water Systems "Models" that automatically generates graphical human interface and decision support system for water and energy optimization.
- Communications layer brings together sensor readings from a diversity of water infrastructure equipment in a standardized, object-oriented format.
- A SaaS offering, there is no risk nor capital cost for a utility to try IPnP and gauge its benefits

With hundreds of installations, the system provides dramatic savings on water infrastructure, electricity and water

C-Valves -

C Valves is the name <u>MODGAL</u> group gave to its subsidiary: a technological startup company, which concluded five years of research and development investing some five million Dollars resulting with a new technology in fluid control.

The initials LFLC define the concept and technology, described by many in the industry as "future technology already proven". "Linear Flow Linear Control" represents a new control concept, which is done linearly and parallel to the flow, as opposed to the more popular way, which is perpendicular to the flow.



Raphael Valves Industries

Raphael Valves Industries is a valve manufacturing company based in Or Aqiva, Israel. The company manufacturers a wide variety of valves including:

- Gate Valves
- Butterfly Valves
- Hydraulic Valves
- Check Valves
- Valves for Fire Fighting Systems

The company is a subsidiary of Tyco International and distributes Tyco's variety of valves mainly for industrial usage.

Evening: Tour in Jerusalem (optional)

