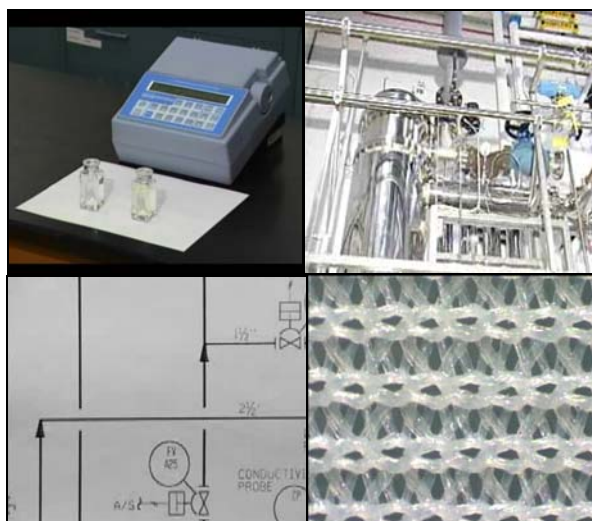


IDA's International Reverse Osmosis Certification (IROC)

# Reverse Osmosis Specialist I



Online Training

## Information Packet



David H. Paul, Inc.

**Questions about online training!**  
Please contact Darrell at [dcunningham@dhptraining.com](mailto:dcunningham@dhptraining.com)



<http://idadesal.org/academy>

## Costs

- \$699 USD
  - Price includes
    - OLC110: Introduction to Water Treatment
    - OLC111: Water Treatment Plant Fundamentals
    - OLC115: Piping and Instrumentation Diagrams
    - OLC117: RO Operation & Maintenance
    - Knowledge Exam
    - Proficiency Exam
    - Narration
    - Many illustrations
      - Video clips
      - Animations
      - Pictures
    - Interactive questions
    - Practice exams
    - Knowledge and Proficiency Exams
  - Discounts may apply
    - Multiple-trainee discount
    - From time to time DHP runs special discounts

## Length:

Thirty-Two (32) hours

## What you will earn:

David H. Paul, Inc Certificate upon successfully passing an exam based on the knowledge and proficiencies learned in this course

## Description:

This training provides the basic knowledge and proficiencies required to work in any reverse osmosis (RO) water treatment plant. This includes:

- Overviews of which industries RO is used
- What the typical process flows are in different industries
- The subsystems of an RO water treatment plant, like air, water and power
- The equipment used, such as tools, valves, instruments, pumps, etc.
- Overviews of RO, RO units and pretreatment



### Overview of Topics

- Water Treatment Overview
- Water Treatment by Industry
  - Drinking water
  - Power generation
  - Pharmaceutical/Biotech
  - Semiconductor/Microelectronics
- Water Treatment Plant Fundamentals
  - Plant Services-Air, Water & Power
  - Electricity
  - Tools
  - Piping
  - Hand Valves
  - Control Valves
  - On Stream Instruments
  - In-Plant Analysis
  - Pumps
- Process Flow Diagrams (PFD)
- Piping & Instrumentation Diagrams (P & IDs)
- RO & RO Units
- Water Contaminants
- Semipermeable Membranes RO/NF
- Osmosis & Reverse Osmosis
- Membranes & Membrane Elements
- Pressure Vessels
- Reverse Osmosis Units
- Brackish Water RO Unit Operation
- Seawater RO Unit Operation
- Potential Problems
- Pretreatment
  - Scaling control
  - Fouling control
  - Chemical attack control



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## **DHP's Training Methodology**

DHP uses the consulting services of a Doctor of Education from Columbia University (Dr. Linda Paul) in the development of its online training courses.

DHP's training methodology includes:

- Short, interesting, interactive lecture sessions using:
  - Lecture slides
  - Video clips
  - Animations
- Pop quizzes to enhance understanding and retention
- Practice exams

## **Who Should Take This Course**

Everyone who works with, or will work with, the reverse osmosis and pretreatment technologies in operating plants needs to know the tips, techniques and proficiencies taught in this online training, including:

- Operators
- Maintenance personnel
- I & C Technicians
- Supervisors/Managers
- Engineers
- Original Equipment Manufacturers
- Service technicians
- More

## **What You'll Receive**

- 32 hours of interesting, easy-to-understand training
- David H. Paul, Inc Certificate upon successfully passing an exam based on the knowledge and proficiencies learned in this course



## Certificate of Completion

Each attendee will receive a DHP certificate of completion following the course.

## DHP Training

DHP has trained over 20,000 water treatment professionals worldwide since 1988. Trainees include industrial, governmental and drinking water clients.

## Testimonials

The following are typical comments from attendees:

DHP Online training is something I recommend to all those who work with water. Water = Life.  
Thanks to the David H. Paul, Inc. team!

**Idriz Matoshi**

The knowledge acquired in this training has given me many new skills and the ability to see other alternatives in solving problems presented in the industry.

**CESAR OMAR SANCHEZ DOMINGUEZ**

The class was superior in detail, presentation and testing. If I were in charge of training, DHP certification would become the basis for RO certification.

**Roy Austin**

The course was very useful for me and company. Through this course I learned many things about RO units, which before this course I didn't know. Now my company is appreciating my work more. Also through this course I corrected some mistakes which we were doing before this course. Now our RO unit is running better and our running cost also was reduced. Thank you very much for DAVID H. PAUL INC. Team for this online course...easy to understand.

**ENERIKO JACKSON NG'UMBI**

This certification has helped me a lot, both in practical and theoretical perspective. It's been my guide during my daily tasks.

**Richard Ruson Rutto**

The online course was very beneficial in kicking off my experiences with Reverse Osmosis systems. It laid superb groundwork for me to continue on to achieve my Level 2 and 3 Certification and I am looking forward to gaining my Level 4 this fall.

**Forrest Whiddon**