



Reverse Osmosis Specialist Training Level 2

(ROS2)

(Classroom and Hands-on, 4 days)

Seminar Details

Cost: \$5,240 (ex GST)

Length: 4 days (RO101, day 1, can be taken as a standalone day)

Dates: <u>Visit website</u> for current offerings as well as proposed

events.

Discounts: Group discount of 10% when registering three or more at

the same time.

Daily Schedule

Times	
7:45am	Registration, Coffee/Tea
8:00am	MORNING SESSION 1
9:15am	Stretch Break
9:20am	MORNING SESSION 2
10:20am	Morning Tea
10:45am	MORNING SESSION 3
12:00noon	Lunch
12:45pm	AFTERNOON SESSION 1
1:30pm	Stretch Break
1:40pm	AFTERNOON SESSION 2
3:00pm	Afternoon Tea
3:20pm	AFTERNOON SESSION 3
4:50pm	Summary and Evaluation
5:00pm	Day Close

In partnership with:



Seminar Description

David H Paul Inc. Training

DHP has trained over 20,000 water treatment professionals worldwide since 1988. Trainees include industry, government and municipal clients.

Seminar Description

Reverse Osmosis Specialist Level 2 Training (ROS2) consists of RO101 (1 day) and Operation Control and Maintenance (3 days). This training is a unique blend of theory and practical, hands-on instruction, limited to a small class size of ten.

Provides the basics of RO technology for those who can only commit to one day of classroom training. RO101 covers the knowledge required to understand the working of any reverse osmosis (RO) water treatment plant.

This training includes:

- Overviews of industries in which RO is used
- Typical process flows
- Overviews of RO, RO units and pre-treatment
- Theory of RO, element construction, basic design and operation constraints

Operation, Control and Maintenance (OCM)

This training extends the theory from RO101 to include the practical understanding and proficiencies needed for correct operation, control, monitoring and troubleshooting of an RO system. This is essential knowledge for anyone who works with, designs, services, installs, operates, maintains and/or troubleshoots RO systems.

This training includes:

- Evaluation of pre-treatment
- Control of scaling, fouling and chemical attack
- Inspecting membrane elements
- Piping and Instrumentation of RO Systems
- Successful loading and unloading of membrane elements
- Monitoring and trending
- **Profiling and Probing**
- Troubleshooting

Who Should Attend

Everyone who works with, or will work with, the reverse osmosis and pre-treatment technologies in operating plants needs to know the tips, techniques and proficiencies taught in this seminar, including:

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

Why You Should Attend

From a Personal Standpoint

- 1. After successfully completing this 3-day program you will be in the top 10% of RO personnel in the world in your level of understanding and proficiency
- 2. If desired, you can add *Reverse Osmosis Specialist I* to your title and bio
- 3. Puts you in a better position for job advancement
- 4. You can't get this information anywhere else
- 5. The instructor has decades of practical RO water treatment experience
- 6. The instructor is an RO water treatment consultant
- 7. The instructor is a professional trainer
- 8. The seminar covers the material in a step-by-step manner so that everyone will understand the concepts presented
- 9. The presentation uses a multimedia format, including many videos and animations

From an Employer's Standpoint:

- Trained employees save you money by:
 - 1. Having the knowledge needed to identify problems at an early stage
 - 2. Having the ability to troubleshoot even difficult problems many RO systems face
 - 3. Using this knowledge to correct problems
 - 4. Less down time of the RO system
 - 5. Increased system reliability
- Being able to show clients, customers and any applicable governmental agencies that your employees have been independently certified on their knowledge and proficiencies.

What You Will Receive

Training assessed and accredited by David H Paul Inc., a world leader in high-tech water treatment training.

Training based on the extensive experience of the DHPaul trainers, who have trained around the world at countless facilities.

Interesting and easy-to-understand theory, blended with practical application gained from years of training and operator experience.

The latest in multimedia training including 3-D animations.

A highly illustrated workbook.

M/Tea, A/Tea and Lunch.

Certificate of completion.

DHP's Training Methodology

DHP uses consulting services from Columbia University in the development of its training seminars. DHP's training methodology includes:

- Short, interesting, interactive lecture sessions using:
 - Power Point™ slides
 - Video clips
 - o Animations
- Group exercises to enhance understanding and retention
- Workshops to further enhance understanding and retention
- Optional daily open-book Knowledge Verification Exam to document what was learned

A Knowledge Verification Exam and hands-on Proficiency Verifications are given each day. Since 1988, DHP has been training water treatment personnel like you. We take you step-by-step through the knowledge and proficiencies needed for advanced troubleshooting of an RO system.

All exams are open book because nobody remembers everything for the rest of their lives...but you'll know in the future where to get the information you need in the book.

We provide a lot of repetition so that you will have no problem getting good scores. For example, to make sure that you know how to use membrane manufacturers' design software to calculate water flux rate and minimum concentrate flow rate, we:

- 1. First, go over the information in a Power Point™ format.
- 2. Second, go over the information in a membrane manufacturer's design program.
- 3. Third, obtain operating data from an actual RO system and compare the actual operational data to the projected values from the design software.
- 4. Fourth, have a workshop on the topic, which serves as a practice exam for the Knowledge Verification Exam at the end of the day. All workshops are performed in groups to aid in the learning experience. There will be no surprises on the daily Knowledge Verification Exams and they are open book.

Knowledge Verification Exams are optional. If you don't want to be certified, you don't have to take the exams.