

# 5 reasons you won't want to miss this seminar!

1. You'll learn about photovoltaic solar energy technology and system components.
2. You'll learn about installation considerations for photovoltaic energy systems.
3. You'll review the economics of solar energy systems, including return on investment.
4. You'll explore types of solar hot water systems.
5. You'll study passive and active solar heating systems.

Register online at: [www.halfmoonseminars.com](http://www.halfmoonseminars.com)



HalfMoon LLC  
PO Box 268  
Eau Claire, WI 54702-0268

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**Examine** how photovoltaic solar energy systems work

**Explore** installation considerations for a photovoltaic energy system

**Review** the economics of solar energy systems

**Evaluate** types of solar hot water systems

**Learn** about passive and active heating systems

*Kentucky, Indiana, and Ohio Architects*  
6.0 Continuing Education Hours (HSW)

*Kentucky, Indiana, and Ohio Engineers*  
6.0 PDHs

*American Institute of Architects*  
6.0 SD/HSW Learning Units

*Construction Specifications Institute*  
0.6 HSW CEUs

HalfMoon LLC presents:

# The Solar Energy Course for Architects, Engineers and Contractors

Lexington, KY • Friday, August 13, 2010

## Agenda

### All Things Photovoltaic

*J. Coxon*

How solar photovoltaic energy systems work

- Light and the photovoltaic cell
- Cell operation
- Measuring photovoltaic performance

Types of photovoltaic cells and materials

- Silicon, polycrystalline, single crystalline

Flat-plate solar photovoltaic energy systems

- Modules
- Other components and mounting systems
- Installation
- Operation and maintenance

### Solar Energy Economics

*D. Gabbart*

Solar energy site assessments

- Determining who can conduct an assessment
- Elements to include in the assessment

Calculating return on investment (ROI) for solar energy systems

- Obtaining solar energy incentives and tax credits

Case studies

### Solar Hot Water Systems

*D. Gabbart*

Direct and indirect systems

Passive and active systems

Installation

Operation and maintenance

Case studies

### Solar Heating and Cooling

*D. Gabbart*

Passive and active heating systems

Cooling systems

Solar pool heaters

Register online at: [www.halfmoonseminars.com](http://www.halfmoonseminars.com)

# About the Seminar

**Friday, August 13, 2010**

Hilton Lexington Downtown (859) 231-9000  
369 West Vine Street • Lexington, KY 40507

**\$259 for one or \$239 each for three or more** from the same company, registering at the same time. Each registration includes one copy of *The Solar Energy Course for Architects, Engineers and Contractors*.

**It's easy to register. Enroll today!**

Pre-registration is recommended. Walk-ins will be accepted if space is available. You will be contacted if any scheduling changes occur. We do not send confirmations.

- **Register online at [www.halfmoonseminars.com](http://www.halfmoonseminars.com)**
- Return the attached form with check payable to **HalfMoon LLC** to: HalfMoon Seminars, PO Box 268, Eau Claire, WI 54702-0268
- Fax the attached form to **(715) 835-6066**.
- Call **(715) 835-5900** to register over the phone.

**Cancellations:** Cancel at least 48 hours before the start of the seminar (CDT), and receive a full tuition refund, minus a \$10 service charge for each registrant. If you cancel after that time, you may choose to apply a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

**Earn continuing education credit!**

- 6.0 PDUs for Kentucky architects
- 6.0 HSW CEUs for Indiana architects
- 6.0 HSW Clock Hours for Ohio architects
- 6.0 PDHs for Kentucky, Indiana, and Ohio engineers
- 6.0 SD/HSW Learning Units registered with the American Institute of Architects Continuing Education System
- 0.6 HSW CEUs registered with the Construction Specifications Institute Construction Education Network

This program will be accepted for architect and engineer continuing education by most states. Please refer to specific state rules to determine eligibility, or contact HalfMoon LLC for assistance.

Attendance will be monitored and reported to AIA/CES and CSI/CEN as requested. Attendance certificates will be mailed to all participants after the event.

**CD/Manual Package:** An audio recording of this seminar is available for \$269 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration  
8:00 - 8:30 a.m.  
Morning Session  
8:30 - 11:45 a.m.  
Lunch (On your own)  
11:45 a.m. - 1:00 p.m.  
Afternoon Session  
1:00 - 4:15 p.m.

# Faculty

**Jeremy Coxon** *Vice president of SunWind Power Systems, Inc.,*

Mr. Coxon is co-founder with Patricia Coxon of SunWind Power in Floyds Knobs, Indiana. He has previous experience in both energy engineering and renewable energy, having worked for 15 years in a variety of energy and engineering-related employment at Rohm and Haas Inc. and Eli Lilly. He has a master's degree in Mechanical Engineering from the University of Louisville and is a NABCEP (North American Board of Certified Energy Professionals) certified photovoltaic installer. SunWind Power Systems is a premier residential and commercial dealer. The company is a certified minority woman-owned business. SunWind Power Systems is a factory authorized Southwest Windpower, AET, and Sharp dealer.

**David Gabhart** *Mechanical engineer, founder, and owner of Solar Designs, Inc.*

Mr. Gabhart studied mechanical engineering for four years at Speed Scientific School at the University of Louisville before beginning a design-build mechanical contracting company. Mr. Gabhart's first renewable energy installation was a solar space heating grant for NASA in 1975. He has designed and installed many types of solar thermal systems for space heating, domestic hot water, pool heating, and radiant heating. He has been actively involved in designing and installing geothermal heating and cooling systems since the late 1970s. Located in Louisville, Solar Designs is a member of the American Solar Energy Society (ASES), Geo-Consortium, and the International Ground Source Heat Pump Association (IGSHPA). It also holds licenses in five cities and states.

Register online at: [www.halfmoonseminars.com](http://www.halfmoonseminars.com)



## The Solar Energy Course for Architects, Engineers and Contractors

Friday, August 13, 2010

- Yes, I will attend** – Lexington, KY - Friday, August 13, 2010  
\$259 for a single registrant or \$239 each for three or more from the same company registering at the same time. (Flash drive with program materials included.)
- No, I am not attending.** Please send me the CD/Flash Drive Package: \$269 (Shipping and handling included.) Product will ship UPS. Allow five weeks from the seminar date for delivery. Will not ship to PO Boxes.
- Check payable to HalfMoon LLC**  
(  Yes, I was pre-registered by phone or fax.)
- Credit Card MasterCard, Visa, American Express, or Discover.**
- Card Number: .....  
Expiration Date: .....  
Cardholder Name: .....  
Signature: .....  
Email: .....  
*Email is used for credit card receipt and program changes only.*
- ♿ I need special accommodations. Please contact me.

**Complete the following for each registrant.**  
*Attach duplicate forms if necessary.*

Company/Firm: .....  
Address: .....  
City: ..... State: ..... Zip: .....  
Phone Number: .....  
Name: .....  
Position: .....  
Name: .....  
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