NRRPT

The NRRPT NEWS

OFFICIAL NEWSLETTER of the *National Registry of Radiation Protection Technologists*

August 2015 Edison

Incorporated April 12, 1976

Chairman's Message

Greetings fellow RRPTs !

Let me begin with congratulating the 62 individuals that passed the NRRPT exam on February 21 and August 1 of this year. Your hard work and dedication to excel in the field of radiation safety will not go unnoticed. Every day employers are looking to hire and promote persons that demonstrate they can set a goal and reach that goal through hard work and perseverance. The hours of study going through the regulations, radiation protection theory, and mathematical calculations have paid off with the achievement of this important milestone in your careers. I know that you will apply these same principles to other facets of your life and career.

Also in this newsletter is an article about Lorenzo Cabrera and his support of the NRRPT scholarship program. Lorenzo was able to use his NRRPT certification towards educational credits and with a scholarship awarded by the Registry, was able to obtain his B.S. in Radiological Health Physics. Remember that earlier statement about goals, hard work and perseverance? Lorenzo has become very successful in the radiation safety business and wants others to pursue their goals of a higher education. Therefore, he has given back to the Registry with scholarship opportunities. If you seek to advance your education and need scholarship assistance, please go to the "Forms" section on the NRRPT.org web page and complete the scholarship application for submittal to our Awards Committee. Ed Lohr (Awards Committee Chairman) and the committee representatives will review the scholarship applications and get back to those needing assistance to pursue their educational goals.

Since I am on the subject of education, a new ad-hoc committee (AERO - Academic Expansion and Reach Out) was formed last year to begin reaching out to two and four year radiation safety degree programs. Members of this committee have reached out to a number of two year degree programs, Aiken Technical College

Inside This Issue

Contacts

Eddie Benfield, Chairman of the Board
(803) 701-3810 (w)
eddie.benfield@duke-energy.com

DeeDee McNeill DeGrooth
(401) 637-4811
nrrpt@nrrpt.org

Dwaine Brown
(423) 722-1979
ddbrown@energysolutions.com

and Spartanburg Community College, to discuss the nuclear renaissance with the construction of new nuclear units and pending retirement of the aging radiation safety workforce. If you are within easy travel of one of these institutions and would wish to promote the field of radiation safety and the NRRPT, please contact me personally and I will assist you in any manner possible to promote the Registry and the benefits of the radiological safety profession.

Next year the Registry will be celebrating its 40th year and I look forward to this milestone with our registered practitioners. The founders of the Registry, such as Don Marshall and Arthur Humm, never envisioned that over 5000 persons would become Registered Radiation Protection Practitioners and the Registry would reach out and become internationally recognized in Canada and South Africa, pending. An article about our humble beginnings will be included in next year's newsletter and interviews and quotes from past chairs of the Board of Director's will be shared in that same newsletter.

Last but not least, I wish everyone a safe Fall 2015 outage season and look forward to hearing from others in the business. I always look forward to corresponding with others in the radiological safety profession and would enjoy reading articles about activities that our registered professionals have undertaken this year to protect their plants, personnel and the public from the harmful effects of ionizing radiation.

Respectfully,
Eddie Benfield
NRRPT, Chairman of the Board

Emerging Issues of Tissue Reactions

By Suketu Patel
MSc Candidate, McMaster University, Hamilton, Canada

On April 21, 2011 the International Council on Radiological Protection (ICRP) released a statement regarding detrimental effects of radiation effects and the recommendations for late deterministic effects arising from exposure to radiation. These deterministic effects are now referred to as tissue-reactions due to the growing evidence that some effects are not observed in the short period after exposure (few weeks to a year), rather some of the responses can be modified after exposure and may take years to develop. One of these tissue reactions, which the ICRP has focused on is cataract of the lens of the eye. The lens of the eye is one of the most radiosensitive tissues in the body and it had been long thought that cataracts can only be induced after high doses (up to 10 Sv for acute exposure and 8 Sv for chronic exposure) [ICRP 103]. These regulations were based on studies that had too few subjects with doses below a few grays, did not take into account the long latency period with low doses, generally had short follow up periods, and were not designed to detect any early lens changes. After reviewing recent epidemiological studies, which take into account the inverse relationship between dose and latency period, the ICRP now estimates a threshold of 0.5 Gy (for both acute and chronic exposures). Due to this large reduction in the threshold, the ICRP recommended annual limit for occupational exposure in planned exposures has also been greatly reduced from 150mSv/year to 20mSv/year, averaged over 5 years (with no single year exceeding 50 mSv). The ICRP also indicated that stroke and cardiovascular diseases have a significantly lower threshold of induction (0.5 Gy) than previously recommended, however there was no new suggested changes to the limits for effective dose.

It is a separate issue whether each member country of ICRP adopts the suggested recommendations or not, but dosimetry is currently an issue for the countries that do move forward in adopting the recommendations. In Canada, licensees are required to use a licenced dosimetry service to measure dose, but this might be a problem because currently no dosimetry services measure dose to the lens of the eye. Licenced facilities would be required to assess every worker and determine which worker's activities will lead to an increased exposure to the lens of the eye. Workers assessed to potentially exceed the annual limit will be required to wear a lens dosimeter, similar to extremity dosimeter requirements, where if a worker's dose to the hands are assessed to be different than their whole body dose, they are required to wear an extremity dosimeter. Dosimetry services today estimate the dose to the lens by using the measured deep dose equivalent and computer algorithms. For workers that are usually exposed to uniform radiation fields without any partial shielding, which includes most of the workers in the nuclear industry, the above method of dose estimation for the lens is fairly accurate. Therefore a worker who exceeds the whole body annual dose limit (20 mSv) is also likely to exceed lens dose of 20 mSv. This method of dose estimation is only accurate for gamma exposure, for other types of radiation (ex. soft x-rays and beta particles) the estimated dose is not very accurate and might be very different from shallow/deep

dose measurement. Therefore for situations like this and also for situations which use partial shielding, better techniques are required to measure or estimate the dose to the lens of the eye.

Currently this reduction in the annual limit is important in the field of interventional cardiology or radiology, where doctors are constantly exposed to non-uniform x-rays, and also nuclear energy workers who work under non-uniform fields. To reduce dose, facilities can reduce their exposure time or use additional shielding. The use of leaded safety glasses is an effective way to reduce the dose to the lens of the eye from soft x-rays, and with the addition of side shielding to these glasses, exposure from scattered x-rays is largely reduced. For shielding against beta particles, simple plastic safety glasses with the addition of side shields is sufficient.

The Australian Radiation Health Committee has recommended that all of their radiation users start implementing these new recommendations by the ICRP, and the Canadian Nuclear Safety Commission is considering adopting these new limits. In North America and elsewhere, regulatory authorities could pursue several possible options, which include:

1. No change, continue with the existing regulatory requirement (150 mSv).
2. Change the current requirements by adopting the ICRP- recommended dose values.
3. Change the current requirements to adopt a single, reduced dose limit for the lens of the eye. For example, a single lifetime limit of 50 mSv (5 rem) or 20 mSv (2 rem).

If countries are to adopt the suggested recommendations by the ICRP, there will be implication which include:

- Worker perception (workers might ask whether or not they were protected before)
- New shielding and dosimeter issue
- Facility Assessments
- Administrative burden
- Cost Implications:
  ⇒ Additional training, dosimetry, shielding, enhanced medical examinations for workers

References:

ICRP, 2007. The 2007 Recommendations of the International Commission on Radiological Protection. ICRP Publication 103. Ann. ICRP 37 (2-4).

Cabrera Services Acknowledgment Plaque

On Friday July 24th, David Biela presented Cabrera Services with an **NRRPT** plague for the company and the company's founder, Lorenzo Cabrera's ongoing support for the **NRRPT** scholarship program. The contribution to the **NRRPT** scholarship program by Mr. Cabrera is an amazing example of someone "Passing It Forward". Mr. Cabrera worked as a Health Physics Technician servicing nuclear power plants during the 1980s and became a Registered Radiation Protection Technologist in 1989. While working as a technician and attending night school in 1990, Mr. Cabrera received a scholarship from the **NRRPT** and ultimately was in a position to be able to enroll full time in the University of Massachusetts Lowell where he earned his B.S. in Radiological Health Physics.

In 1994, Mr. Cabrera founded Cabrera Services Inc., a company which specializes in radiological and environmental remediation, health physics and waste management, all performed with the goal of remediating and closing out sites that have been formally contaminated with radioactive materials. In very generous show of support for the **NRRPT**'s scholarship program, in 2009 Mr. Cabrera donated $50,000 as a thank you for the registries support to him in 1990 and as a way to pay it forward to the next generation of technicians. Many technicians have benefitted from his generosity and many more will benefit in the future.

Thank You Cabrera Services Inc. and Lorenzo Cabrera for your support!

David Biela (left) Robert Flowers (right) (Cabrera President and Chief Operating Officer)

NRRPT
Night-Out in
Indianapolis, IN

An enjoyable night-out at the historic Slippery Noodle Inn with the Board & Panel members and family & friends.

***** Our generous NRRPT Night-Out sponsors *****

Left to right: Todd Davidson (Envirachem), Eddie Benfield (Duke Energy), Tom Hansen (Ameriphysics), and Bob Wills (The GEL Group),

Board, Panel Members and friends

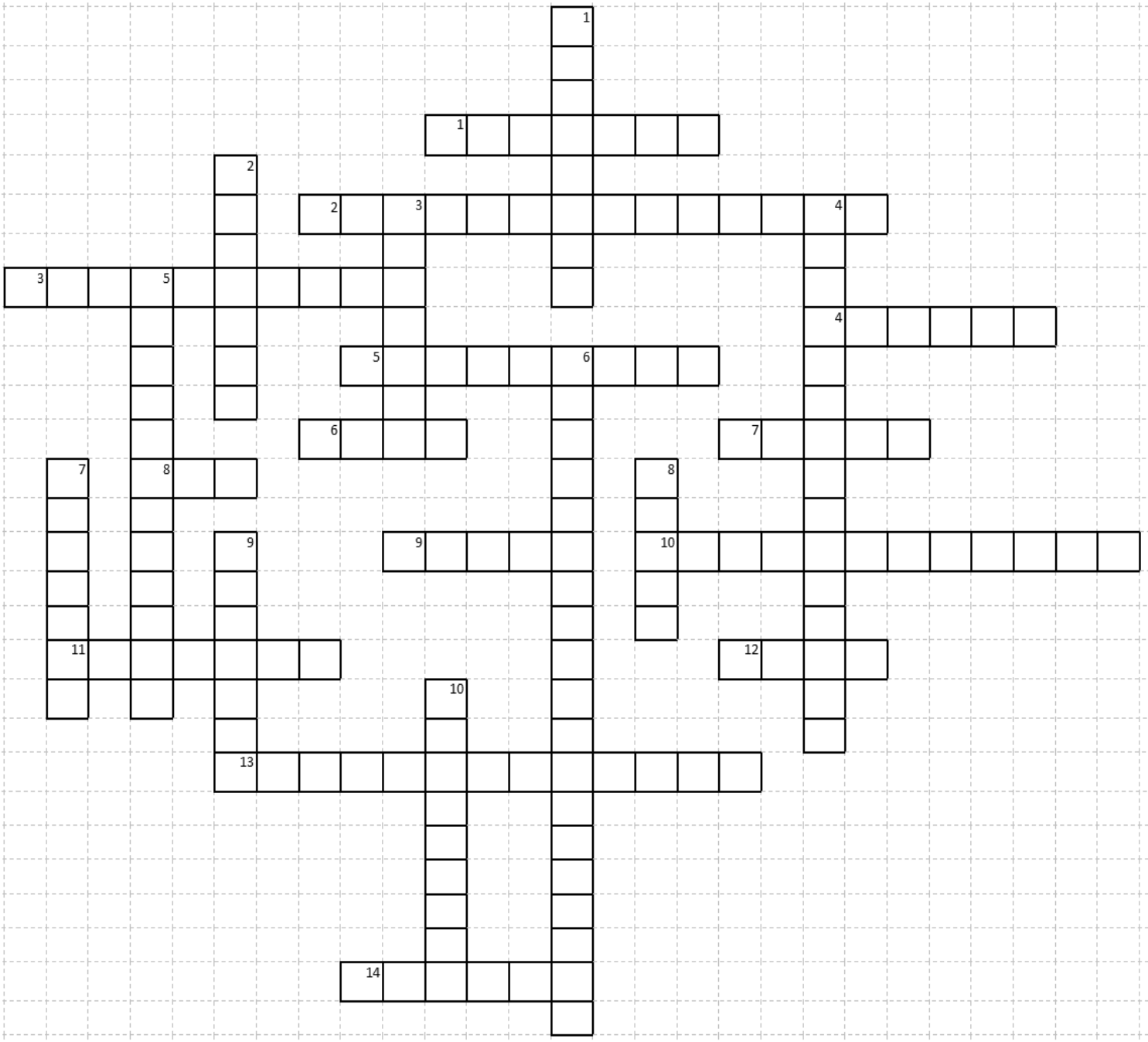
Eddie Benfield thanking our sponsors

Bob Wills and Kelli Gallion

Some of the group

Rad Crossword Puzzle

Solution on Page 11



NRRPT Mid-Year Meeting

The 2016 **NRRPT** Board and Panel mid-year meetings will be in conjunction with the HPS Mid-Year meeting in Austin, TX. The **NRRPT** Board meeting is Saturday, January 30 and Tuesday, February 2. The **NRRPT** Panel meeting is Sunday January 31 and Monday February 1. All **NRRPT** members are welcome to attend!

Rad Crossword Puzzle

Across

1 3 DAC of Rn222 is considered 1 _____ level

2 the upper respiratory pathway

3 aka white blood cell

4 The detector that is unable to distinguish the energies of the incoming rays is known as a ____ counter

5 W_t used in calculating a CEDE is the Tissue _____ Factor

6 approximately 12 feet/MeV is the rule of thumb for the range of a ____ particle

7 37 Giga Becquerels is equal to one _____

8 100 ergs of energy deposited in 1 gram of any absorber is know as a _____

9 Radiation badge performance testing is done by _____ accredited laboratories

10 OSL is short for Optically Stimulated _____

11 This decay chain includes Radon 222

12 When used In pressure demand mode, this device has a protection factor of 10,000

13 Non-stochastic effects are sometimes called _____ effects

14 Activated charcoal is used to collect airborne samples of what gas

Down

1 A liquid scintillation counter uses a liquid mixture know as a _____ , as the counting medium

2 Any dose received over a long period of time is called _____

3 SI equivelent of the Rem

4 6.02252E+23

5 The steepest section of the entire characteristic curve for gas-filled detectors is called the _____ region

6 In shipping a radioactive package, the T.I. is shown on the shipping papers, what is T.I.

7 This "glow-in-the-dark" isotope has been used in exit signs and gun sights

8 True or False; In Vivo bioassay counts urine or fecal samples externally

9 DAC stands for the _____ Air Concentration

10 CEDE stands for the _____ Effective Dose Equivalent

NRRPT Annual Meeting

The 2016 **NRRPT** Board and Panel annual meetings will be in conjunction with the HPS Annual meeting in Spokane, WA. The **NRRPT** Board meeting is Saturday, July 16 and Tuesday, July 19. The **NRRPT** Panel meeting is Sunday July 17 and Monday July 18. All **NRRPT** members are welcome to attend!

NRRPT

Board of Directors Meeting

in

Indianapolis, IN

July 2015

NRRPT

Panel of Examiners Meeting

in

Indianapolis, IN

July 2015

If you'd like to join the Panel of Examiners please contact one of the following:

Exam Panel Chairman—Rick Rasmussen—rickras@lanl.gov

Exam Panel Vice-Chairman—Dave Tucker—tuckerdm@mcmaster.ca

Executive Secretary—DeeDee McNeill DeGrooth—nrrpt@nrrpt.org

Welcome New 2015 NRRPT Members

Congratulations to the following individuals who successfully passed the **NRRPT** Examination on February 21, 2015:

Ryan E. Adams
Adam L. Berry
Kyle L. Bronson
Bret A. Cole
Bernard K. Finnigan
Dominic J. Ford
Erik A. Galvan
Matthew L. Gibson
Anne M. Harris
William Jeffries
Jeffrey Klimczak
Barry Lawson
Eva Maggard
Trang Marquez
Paul W. Marshall
David K. McAllister
Sean P. McCann
Adrienne J. McKinley
Ryan P. Murdock
Terry J. Olson
Ryan Penney
Adam D. Phillips
Ryan Roberts
Joseph W. Rogers
Eric CG Sappington
Brian Sprague
Israel Tadesse
William Tetley
Jose A. Torres Moreno
Damen M. Trent

Congratulations to the following individuals who successfully passed the **NRRPT** Examination on August 1, 2015:

Lisa S. Berta
Caroline Buckingham
Michael Cooper
Jordan Cox
Marc D. Cyr
Gerald Davis
John C. Detwiler
Brett Falkenrath
Theodore J. Green
Medwell W. Hill
Dan E. Hill
Joseph Hirner
Ray Hulse
Denise Kilby
Joseph Landry
Ryan McMurray
Aaron P. Miaullis
William Plunkett
Shane Reese
Brian Robinson
David Salerius
Kenneth Schafer
Ryan B. Sharpe
Jared Smith
Paul Steinmeyer
Albert L. Travis
James B. Turpin, II
Dustin Van Dame
Robert Weaver
Brian Weir
Scott Williams
Seth Williams

Exam Preparation

By David Biela

For approximately the last 11 years the **NRRPT** has been including a questionnaire "How Did You Prepare for the Exam" along with the exam material and have asked the candidates to complete the questionnaire. Over the years we have compared the successful individuals to the answers to the questions to try and come up with correlations between success and the candidates history and we have found that the only item that had a direct correlation to success was the quantity of time spent studying. The successful candidates typically had greater than 200 study hours put in. Below are some of the questions that were asked.

1. Did you attend a preparation course or on line training of any kind?

2. Study hours put in?

3. Previous nuclear experience (Nuclear Power, DOE, Military, Medical etc.)?

The Board and Panel would encourage any candidate that is preparing for the **NRRPT** exam to put in the study time. Below is a consolidated list of study material that would help you prepare for the US exam. This is **not** the all-inclusive list that can be found on the NRRPT web site, but it does cover a large portion of the material that will be covered by the exam.

1. 10CFR20

2. 10CFR835

3. 10CFR34

4. 10CFR35

5. 49CFR173

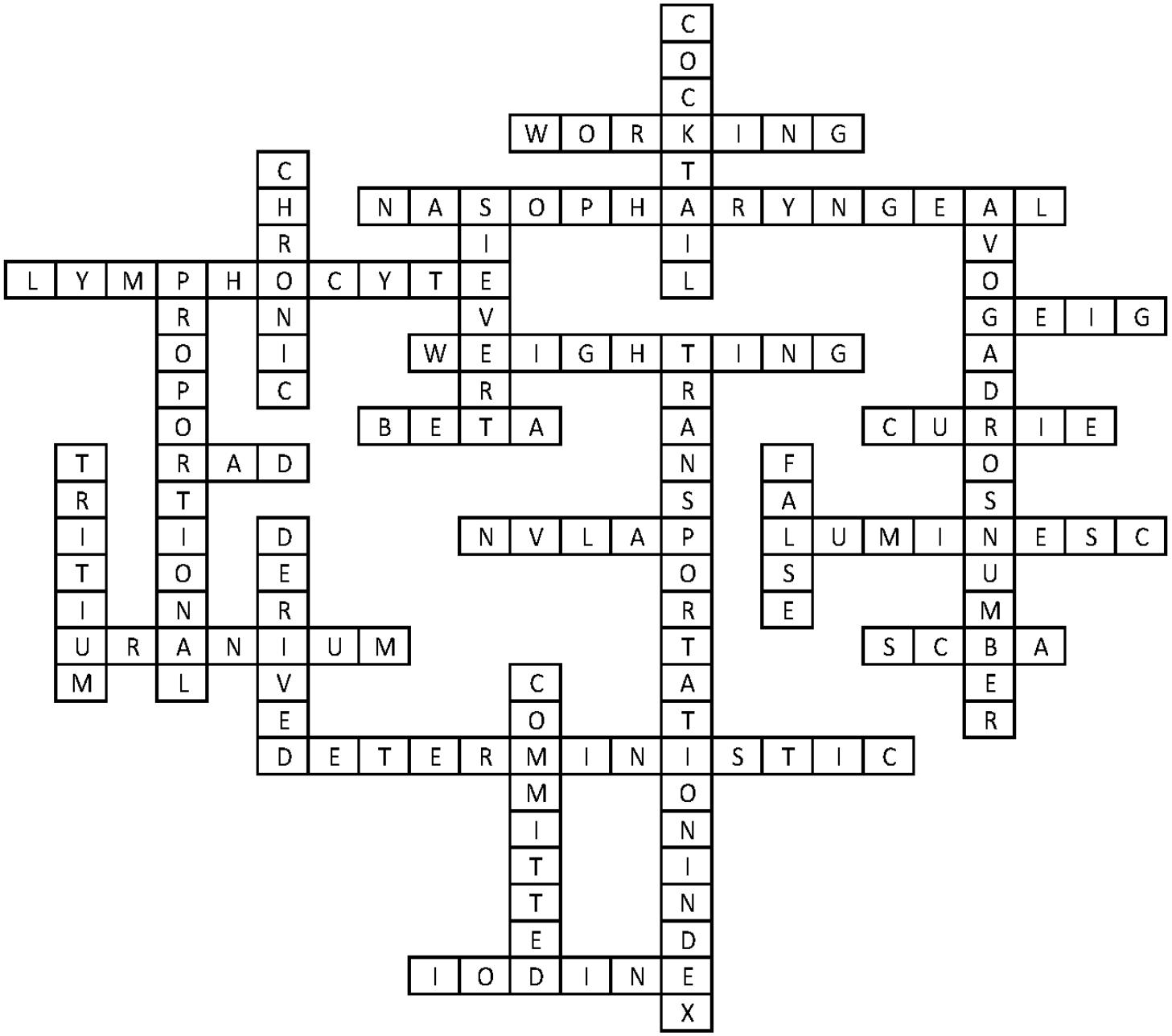
6. Problem Solving Guide "Math"

7. One of the Health Physics Technician Training Books

NOTE: If you choose to attend one of the **NRRPT** preparation classes, I would recommend doing it as near as possible to when you plan to sit for the exam.

Rad Crossword Puzzle

Solution



FYI: the Member Emeritus Application Form has been revised. Please use the form on next page if you wish to apply for Emeritus status!

NRRPT MEMBER EMERITUS APPLICATION

Member Emeritus is an award that may be given to registered member who has made sustained and substantial contributions to the Registry and is retired from active employment as a Registered Radiation Protection Technologist.

Send application to: NRRPT
P.O. Box 3084
Westerly, RI 02891

The Awards Committee will review the application and make a recommend to the Board of Directors. The applicant will be informed of the Board of Directors' decision.

Applicant's Information

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Year Registered: _____ Year Retired: _____

Contribution to the Registry: _____

_____

_____

I certify that the information provided is accurate and complete.

_____ _____

Applicant's Signature Date

_____

Office Use

Awards Committee Recommendation: Approve _____ Disapprove _____

Board of Directors' decision: Approve _____ Disapprove _____

Date: _____

ENERGIZE YOUR CAREER AND JOIN THE BHI Energy TEAM!

As the largest provider of radiation safety technicians to the commercial nuclear power industry and Department of Energy facilities, BHI Energy offers over 4,000 Junior & Senior Radiation Safety opportunities annually.

⇒ Be a part of the "nuclear renaissance!" Now is the time to experience nuclear industry growth and exciting new opportunities with BHI Energy

⇒ Flexible assignments ideal for varied backgrounds – including industry retirees or those with Department of Energy experience

⇒ Competitive compensation & benefits, paid travel & living expenses

⇒ Training programs & career development for entry level positions

⇒ Flexible project locations in 35 states nationwide

⇒ Short term & temporary assignments available

To inquire about opportunities please contact:

(800) 225-0385, then press # and 2 when prompted for our recruiting team

Send resumes to*: nuclear@bhienergy.com Fax (508) 746-8588

*(*Please reference NRRPT when sending in your resume)*

60 Industrial Park Road, Plymouth, MA 02360 | www.bhienergy.com

Ameren Missouri-Callaway Plant

Bob Farnam
P.O. Box 620
Fulton, MO 65251
(573) 676-8784
(573) 676-4484 (fax)
refarnam@cal.ameren.com
www.ameren.com

Among the nation's top utility companies in size and sales, Ameren is the parent of Ameren Missouri, based in St. Louis, MO, and AmerenCIPS, based in Springfield, IL. Ameren is also parent to several nonregulated trading, marketing, investment and energy-related subsidiaries. Ameren employees, totaling approximately 7,400, provide energy services to 1.5 million electric and 300,000 natural gas customers over 44,500 square miles in Illinois and Missouri.

Cabrera Services

Shannan Ryll
473 Silver Lane
East Hartford, CT 06118
860-569-0095
860-569-0277 (fax)
sryll@cabreraservices.com
www.cabreraservices.com

Cabrera is a trusted integrator for radiological remediation and munitions response solutions. We bring world class expertise in health physics and munitions response along with a broad base NRC radioactive materials license to solve our client's toughest challenges. As an integrator, we bring our clients:

- Expertise in securing site closure/release;
- Smart design of characterization, sampling and FSS programs; and
- Innovative technologies that expedite closure, ensure compliant Material Control and Accountability, minimize remediation footprints and waste quantities for off-site transport and disposal, and achieve schedule and cost efficiencies.

www.reefindustries.com

REEF INDUSTRIES

ri@reefindustries.com

GRIFFOLYN®: CONTAINMENT SYSTEMS FOR OUTAGE, MAINTENANCE & CONSTRUCTION PROTECTION

For more than four decades, Reef Industries has been providing a variety of specialty reinforced plastic laminates to the nuclear industry. These products are ideal for containment during outages, construction, maintenance and decommissioning projects. Strong, yet flexible, lightweight and easily handled, Griffolyn® products are highly resistant to tears and have an exceptional outdoor service life.

Griffolyn® can be produced with specialized properties including fire retardancy and low contamination for safety applications around critical materials or work areas. Performance features such as corrosion inhibition and anti-static properties are also available for sensitive equipment. Products range in weight, thickness and special composites, and are ideal for:

- Floor covers
- Custom box liners
- Containment enclosures
- Bags
- Tubing
- Outdoor/Indoor storage
- Shipping covers for contaminated equipment
- Secondary containment systems
- Decontamination pads
- Underslab vapor retarders for critical applications
- Feed water heaters/rotor covers
- Soft-sided packaging for surface contaminated objects
- FME barriers

The advantages of using Griffolyn® containment products for new plant construction and maintenance projects are vast but the immediate recognized benefit is the reduction in the costs associated with improving project schedules. Griffolyn® products reduce the volume of radwaste, which in turn lowers disposal costs.

From assisting in the design of uniquely configured and fabricated products to one of a kind materials custom built from scratch, Reef Industries' highly experienced staff can fabricate a product that meets your exact requirements. Custom printing capabilities are also available to meet any message requirements. We can custom configure a product with nylon zippers, hook and loop fasteners, grommets, D-rings, webbing, pipe loops or many other possibilities. Reef Industries can work with exact dimensions, sketches and/or ideas to custom design and build a product specifically suited for your needs.

Stock rolls and sizes are available for immediate shipment. If you require dependable, long-lasting, cost-effective on-site fabrication tape, Reef Industries can supply you with pressure sensitive and/or double-sided tape. Custom design and fabrication are available in 7-10 days.

Canberra Industries, Inc.

800 Research Pkwy
Meriden, CT 06450
(800) 243-3955
(203) 235-1347 (fax)
customersupport@canberra.com
www.canberra.com

Canberra is the leading supplier of innovative and cost-effective nuclear measurement solutions and services used to maintain safety of personnel, assess the health of nuclear facilities and safeguard the public and environment. Applications for CANBERRA offerings include health physics, nuclear power operations, Radiation Monitoring Systems (RMS), nuclear safeguards, nuclear waste management, environmental radiochemistry and other areas.

Detroit Edison Fermi 2

Richard LaBurn
6400 N. Dixie Hwy
Newport, MI 48182
(734) 586-4974
(734) 586-1883 (fax)
laburnr@dteenergy.com
www.dteenergy.com

Detroit Edison operates the Fermi 2 Nuclear Power Plant located in Monroe, MI along the shores of Lake Erie. Fermi is a 1200 MW power plant supplying electricity to the metropolitan Detroit area.

Day & Zimmermann

We do what we say

John Ellison
5800 East Skelly Drive, Ste 800
Tulsa, OK 74135
888-488-0880
918-743-4867 (fax)
john.ellison@dzatlantic.com
www.dayzim.com

Day & Zimmermann provides radiological services to meet the unique demands of the nuclear power industry. We deliver all levels of health physics, decontamination technicians and radiological support as a trusted partner to numerous commercial nuclear power stations across the U.S.

Duke Energy Corporation

Larry Haynes
526 S. Church Street, MS-EC07F
Charlotte, NC 28202
(704) 382-4481
(704) 382-3797 (fax)
larry.haynes@duke-energy.com
www.duke-energy.com

The new Duke Energy, which is the product of a merger with Progress Energy, is the largest electric power holding company in the United States with more than $100 billion in total assets. Its regulated utility operations serve more than 7 million electric customers located in six states in the Southeast and Midwest. Its commercial power and international business segments own and operate diverse power generation assets in North America and Latin America, including a growing portfolio of renewable energy assets in the United States. Headquartered in Charlotte, N.C., Duke Energy is a Fortune 250 company traded on the New York Stock Exchange under the symbol DUK.

FRHAM SAFETY PRODUCTS, INC.

171 Grayson Rd.
Rock Hill, SC 29732
(803) 366-5131
frhamsc@frhamsafety.com

318 Hill Ave.
Nashville, TN. 37210
(615) 254-0841
frhamtn@frhamsafety.com

Incorporated in 1983, Frham Safety Products, Inc. continues its sole purpose of manufacturing and distributing products to the Nuclear Power Utilities, DOE, DOD, Naval facilities as well as several industrial accounts and related users of safety supplies and equipment.

From the creators of proven products such as the Totes Overshoe and the Frham Tex II, Frham continues their objective to provide products and services which meet or exceed the specifications set forth by customers and the industries that it serves. These revolutionary new concepts include Life Cycle Cost Management (LCCM), Mobile Outage System Trailer (MOST) and Certified Disposable Products (CDP).

- LCCM offers products through a systematic approach of life cycle pricing to include disposal at the purchase point.
- MOST provides onsite product storage stocked systematically specified by the customer for easy access and stringent inventory control.
- CDP consists of proven disposables for every application which includes standard and custom specifications to meet your disposable needs.

Among these services and products, Frham also supplies chemical, biological and radiological equipment which will support applications for domestic, biological, nuclear, radiological or high explosive incident sites. This equipment is able to sample, detect and identify chemical warfare agents and radiological materials as well as provide safe-barrier, personal protection from chemical warfare, biological warfare, radiological and TIC/TIM environments.

F&J Specialty Products, Inc.

Frank M. Gavila
404 Cypress Road
Ocala, FL 34472
352.680.1177/352.680.1454 (fax)/fandjspeciaty.com

ISO 9001:2008 certified manufacturer of traditional and advanced-technology air sampling instruments, airflow calibrators, filter holders, consumables and accessories.
Air Sampler product lines include; high and low volume, tritium, C-14 and battery-powered air sampling systems. Various models are available for both portable and environmental sampling systems. Consumable product line includes; filter paper, TEDA impregnated charcoal cartridges and silver zeolite cartridges. F&J provides comprehensive collection efficiency data for radioiodine collection cartridges. F&J manufactures the premier line of small lightweight emergency response air samplers which can operate from line power, on-board batteries or an external DC power source. Battery powered units have on-board charging systems.

General Engineering Laboratories, LLC

Bob Wills
2040 Savage Road
Charleston, SC 29407
(843) 906-5929
(843)766-1178 (fax)
robert.wills@gel.com
www.gel.com

GEL provides the nuclear industry with radiochemistry, bioassay and analytical chemistry support. GEL is a provider of 10CFR61, REMP and hazardous waste characterization to commercial nuclear reactor sites, DOE sites and DOD facilities throughout the US. For information regarding analytical services please contact Bob Wills.

HI-Q ENVIRONMENTAL PRODUCTS COMPANY, INC.

Air Sampling & Radiation Monitoring Equipment, Systems & Accessories

HI-Q Environmental Products Company is an ISO 9001:2008 certified designer/manufacturer that has been providing air sampling equipment, systems and services to the nuclear and environmental monitoring industries since 1973. Our product line ranges from complete stack sampling systems to complex ambient air sampling stations. HI-Q's customers include the National Laboratories and numerous Federal and State Agencies in addition to our domestic and international commercial customer base. Our product catalog includes: Continuous duty high & low volume air samplers, radiation measurement instrumentation, radiation monitoring systems, air flow calibrators, radioiodine sampling cartridges, collection filter paper and both paper-only or combination style filter holders. Along with the ability to design complete, turn-key, stack and fume hood sampling systems, HI-Q has the capability to test ducts and vent stacks as required by ANSI N13.1-1999/2011.

Master-Lee Decon Services

Robert Burns
430 Miller Road
Medford, NJ 08055
(609) 654-6161
(609) 654-1404 (fax)
burns-ml@comcast.net

Master-Lee is a leading supplier of refueling, maintenance, inspection, operations and outage management services for PWR Nuclear Power Plants in the U.S. Market and has supported the major NSSS companies in the performance of similar tasks at BWR sites. Master-Lee also designs, fabricates and supplies specialty products, tools and parts in support of our various product lines. These capabilities are provided by our broad range of Product Lines: Refueling and Related Services; Pump and Motor Services; NDE – Eddy Current Testing Services; Specialized Reactor Services; Decontamination Services; Decommissioning Services; Engineered Products; and Technical Services.

MJW Technical Services

Laurie Losey
243 Root Street, Ste 100
Olean, NY 14760
(716) 372-5300
(716) 372-5307 (fax)
laurie.losey@mjwts.com

MJW Technical Services will help you keep your radiological instruments fully functional while providing rapid turnaround and excellent customer service. Our factory-trained technicians with over 100 years of combined experience in the radiological and electronic fields, can calibrate and repair all types of instrumentation including Nuclear Density Gauges in our state-of-the-art facility.

Please visit our website at www.mjwts.com or call toll free 1-866-300-3MJW (3659).

Mirion Technologies (MGPI), Inc.

Audrey Summers
5000 Highlands Parkway, Ste 150
Smyrna, GA 30082
(770) 432-2744
(770) 432-9179 (fax)
asummers@mirion.com
www.mirion.com

Mirion Technologies (MGPI), Inc. provides a full range of instrumentation and engineering services for health physics applications and radiation monitoring systems for all nuclear facilities and civil defense markets. We are #1 in North America in electronic dosimetry. We are more than just a leader in technology. We are also recognized for our outstanding customer support.

RADeCO

Brad Lovendale
17 West Parkway
Plainfield, CT 06374
(860) 564-1220
(860) 564-6631 (fax)
www.radecoinc.com

For over 25 years, RADeCO has set the standard for air sampling in the nuclear industry. We supply the highest quality air sampling equipment, filter media, and sampling cartridges. We also provide a full range of calibration, repair service, and spare parts for all your air sampling and air flow measurement equipment. In addition to being an **NRRPT** Corporate Sponsor, RADeCO offers special discounts to the **NRRPT** membership.

STP Nuclear Operating Company

Roger Aguilera
P.O. Box 289
Wadsworth, TX 77843
www.stpegs.com

More than fifty registered Radiation Protection Technologists are proud to work at the South Texas Project's two nuclear power plants. These plants, some of the world's newest, produce more than 2500 megawatts of electricity. The plants, and the team that operates them, set industry standards in safety, reliability and efficiency.

TIDEWATER INC

MARSSIM Implementation

Decontamination & Decommissioning

Radiological Surveys

Environmental Remediation

Radiation Protection Program Management

Licensing and Regulatory Interface

Dose Modeling

Effluent and Environmental Modeling

Radiation Protection Technicians

Radiological Engineers

NRRPT and CHP Prep Courses

Radiological Training

MARSS Responder Wireless Radionuclide Characterization and Response

headquartered near the Nation's Capital

Technical Management Services

Specialized Short Courses in Radiological Training

Our most popular courses include:

NRRPT/ABHP Exam Preparation, Radiation Detection and Measurement, Effective Contamination Control/ALARA Programs, Gamma Spectroscopy Applications, Radioactive Sample Analysis, Neutron Detection and Measurement, Internal Dose Assessment…

Visit our website for the complete course listing

Onsite Training

Get more from your training programs with TMS.

More subjects. More expertise. More customization.

And…More value.

Continuing Education Credits Awarded For All TMS Courses

Robin Rivard
P.O. Box 226
New Hartford, CT 06057
(860) 738-2440
(860) 738-9322 (fax)
rrivard@tmscourses.com
www.tmscourses.com

UniTech Services Group

Gregg Johnstone
295 Parker Street
P.O. Box 51957
Springfield, MA 01151
(413) 543-6911
gjohnstone@unitechus.com
www.UniTechus.com

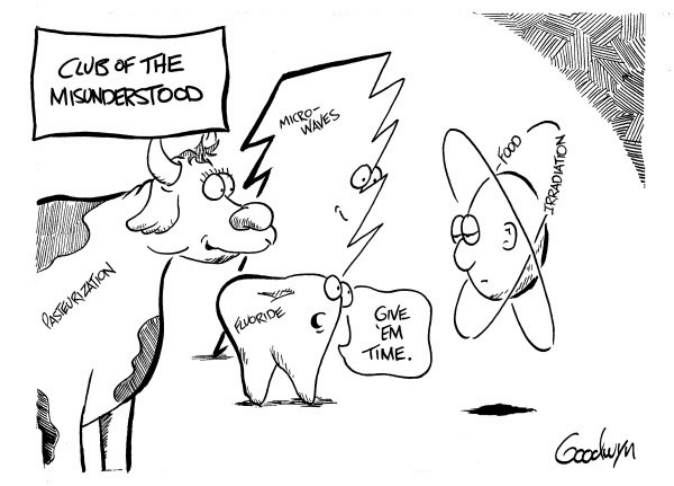
UniTech Services Group is the largest protective garment service organization in the world. With 11 licensed plant locations in the U.S. and Europe, UniTech provides waterwash decontamination, protective clothing sales and leasing, respirator cleaning and leasing in addition to both onsite and offsite tool and metal decontamination services.

ISO 9001 & 14001 Certified

Server Solutions

Vince Bishop
P.O. Box 112
Port St. Joe, FL 32467
(850) 387-0658
VBishop@ServerSolutions.com
www.serversolutions.com

Server Solutions, Inc., a web presence provider, is a veteran-owned small-business established in 1996. Our primary product is a Content Management System that allows anyone with basic computer skills and an internet connection to put together a standards compliant website that also meets the accessibility guidelines of Section 508. We also provide web hosting, email services, and web application development using Adobe ColdFusion and MySQL databases.



Cartoons are used with the permission of the HPS News. Thank you Al Goodwyn for your humorous cartoons!

CHANGE OF ADDRESS FORM:

Name: _____

Old Address: _____

_____

_____

New Address: _____

_____

_____

Effective Date: _____ New Phone Number: _____

Email Address: _____

If you have moved, please complete this form and return via fax, email or USPS mail.

nrrpt@nrrpt.org

(401) 637-4822

P.O. Box 3084
Westerly, RI 02891