



Radium Girls

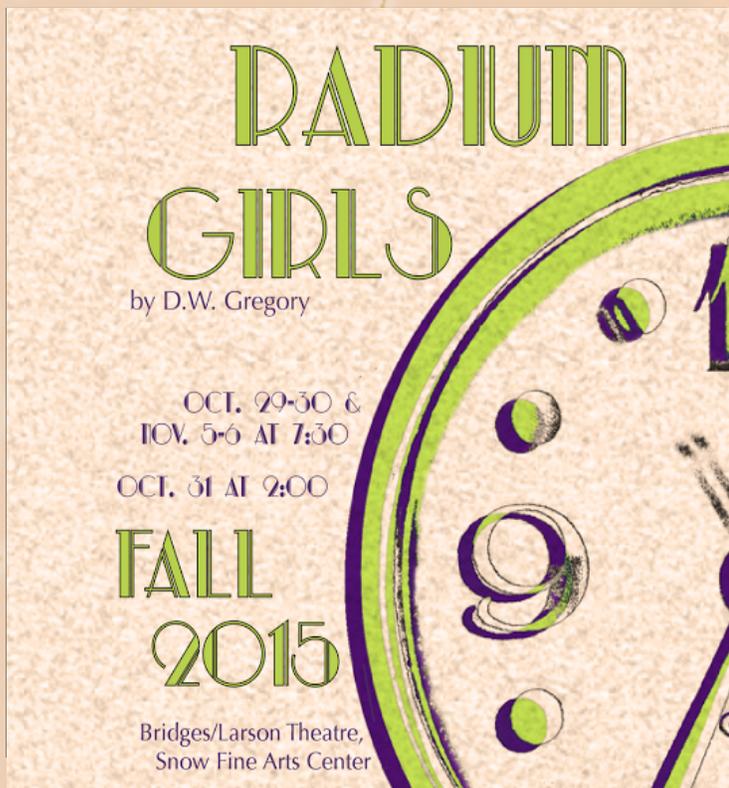


no.203.078

The University of Central Arkansas

- Since 1907

Theatre to Present *Radium Girls*



Show Dates & Times

October 29 & 30, 2015—7:30 pm

October 31, 2015—2:00 pm

November 5 & 6, 2015—7:30 pm

By D.W. Gregory

Study Guide by Chris Fritzges & Cody Charles Douell

Directed by Chris Fritzges



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Plot Summary of *Radium Girls*

“In 1926, radium was a miracle cure, Madame Curie an international celebrity, and luminous watches the latest rage—until the girls who painted them began to fall ill with a mysterious disease. Inspired by a true story, *Radium Girls* traces the efforts of Grace Fryer, a dial painter, as she fights for her day In court. Her chief adversary is her former employer, Arthur Roeder, an idealistic man who cannot bring himself to believe that the same element that shrinks tumors could have anything to do with the terrifying rash of illnesses among his employees. As the case goes on, however, Grace finds herself battling not just with the U.S. Radium Corporation, but with her own family and friends, who fear that her campaign for justice will backfire...”

Radium Girls the Play



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The Cast of Radium Girls



D.W. Gregory

She writes about the exploration of political issues through a personal lens within her plays. The New York Times called her “a playwright with a talent to enlighten and provoke” for her most produced play, “Radium Girls.”

Themes, Symbols, & Motifs

Themes

Corporate World vs. the Worker,
Role of the Press & Media,
Consumerism, Worker’s Rights,
Female Rights, Value of Hard
Work, Justice & Peace

Symbols

Bright light of factory windows

Motifs (support themes):

Fighting time, Reporter & Sob
Sister, Flowers, Painting,
Selling radium products



Karina Martinez

Diane Roeder/ Madame
Curie/ Customer



Zoe Allison

Kathryn Schaub/Society
woman/ Harriet Roeder/
Shop girl



Jared Curtis

C.B. “Charlie” Lee/
William J.A. Bailey/
Cecil Drinker/ Lovesick
Cowboy/Male Shopper



Xander Udochi

Edward Markley/Von
Sochocky/ Elderly
Widower/
Photographer



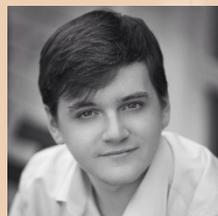
Kayla Williams

Grace Fryer



Taylor Fulgham

Arthur Roeder



Brent Welch

Tom Kreider/
Reporter/ Joseph
Knef/ Venecine
Salesman



Jordyn Daniels

Sob Sister/ Alma
Macneil/ Clerk/ Anna
Fryer



Sydney Stoner

Irene Rudolph/
Katherine Wiley/
Mrs. Michaels



Levi Smith

Raymond Berry/
Harrison Martland/
Frederick Flinn/ Store
Owner

The World of Radium Girls



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World War I (1914-1918)



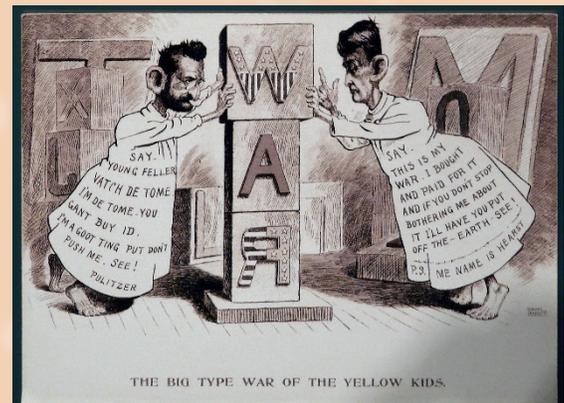
What is Radium?

A rare radioactive metal used as a source of radiation for radiotherapy; before it was found out it was toxic, it was used for: “improving bones”, a better tasting chocolate, in toys and nightlights, in toothpaste, in cosmetics, in heating pads and suppositories, and in clocks and watches among many examples.

Films (silent and talking) & War Propaganda!

Woman’s Lives during the War and Suffrage

Women served multiple purposes during the war. They were directly involved with the war by serving as volunteer nurses on the battle fields and corporation factory workers. Amongst the factory positions that women held, all were nearly seven day employment with extremely low wages and safety conditions. An example would be in the ammunition field, with woman getting lead and mercury poisoning from the shelling case. In addition, dial-painting was another way woman both “helped” soldiers in the field and got shorter lives from Radium Poisoning. In all, woman who were worked at a factory during and immediately after the First World War were likely to not live long. From 1848 to 1920, Woman fought for the equal right to vote; this was granted in the United States in 1919 as the 19th amendment to the US Constitution.



Yellow Journalism (bold headlines & fights to “get the scoop”)

Who Were The Radium Girls?

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Radium Girls

The name Radium Girls was coined by media of the 1920s to describe the plight of five girls as they sued their previous employer, the United States Radium Corporation. The five girls involved were: Grace Fryer, Katherine Schaub, Edna Hussman, Quinta McDonald, and Albina Larice. In addition to these five women, three others, Amelia Maggia, Irene Rudolph, and Hazel Kuser helped spark the ensuring lawsuit after their death. The girls were poisoned by the element, Radium, while they were employed as dial painters at US Radium in Orange, New Jersey during World War I. The woman would paint watch dials using *Undark* paint (developed by Dr. Von Sochocky), which had small traces of pure radium in it; the woman would wet the brush they used by dipping it in their mouth for a pointed end (this is called lip-dip). In total, 50 women died of Radium poisoning



Grace Fryer

Grace Fryer was a bank teller in 1922 who wore a back-brace when she became concerned when her teeth began to fall out for no reason. After an examination using x-ray, it was determined that her jaw had serious decay. Using the information that her doctor suggested (1925), she linked her ailment with her former job. She spent two years finding a lawyer to challenge the corporation, along with many formal colleges; the lawyer who took the case was Raymond Berry. All four of the other radium-injured dial painter and Fryer sought \$250,000 apiece and where dubbed the *Radium Girls*. After nearly two years of stalling by the company, a settlement of \$10,000 and all medical and legal expenses were paid to the girls plus \$600 per year annuity for as long

as they lived. Not very long after the case was settled, only years, Fryer succumbed to radium poisoning at the age of 34 (died October 27, 1933)..



Katherine Schaub

Kathryn was born in 1902 and died on February 18, 1933 at exactly 30 years, 11 months, and 8 days.. She was the cousin of Irene Rudolph; her family took Irene in after her parents died. After her death, she offered her body to science in hopes that a cure for the co-victims of radium poisoning could be found.

Irene Rudolph

Kathryn Schaub's cousin who was the exact same age as her. No description or photograph of her is

known to survive. The second woman, in 1922, to see a dentist in regards to a rotten jaw that sparked concern over the local women. She died in July 1923 of what Kathryn called, "a most terrible and mysterious illness." She is the first known victim to succumb to radium poisoning of the modern industrialized era.

RADIUM EMANATION WATER
Drives Out Uric Acid

Suffering from too much uric acid and diseases caused by faulty elimination—Rheumatism, Gout, Periodical Headaches, Neuralgia, Constipation, Neurasthenia, Auto-intoxication and Lack of Bodily Vigor—quickly relieved in a natural way without drugs or chemicals by our new discovery.

THE WAY TO MAKE RADIUM WATER IN YOUR OWN HOME

with our Rayoide. A little device containing Radium enough to supply a good Meq. Unit of Radioactivity in two quarts of water every twenty-four hours for less than five cents. The Rayoide will last a lifetime.

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"The most wonderful scientific discovery of recent years."—*British Medical Journal*. There is no guess work or experimenting about Radium. People who want to be cured can be cured quickly. Full particulars about Radium and our

REMEDIES

which make a scientific application of this marvelous new power to the treatment of the above mentioned diseases and Asthma, Catarrh, Bronchitis, Dyspepsia, Liver and Kidney Troubles, Malaria, Nervous Disorders, Ecema and Partial Paralysis, will be sent **FREE** upon receipt of inquiry and a statement of your case. Address

RADIUM REMEDIES CO.
67 WABASH AVENUE - CHICAGO, ILL.

Other Real People of *Radium Girls*

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Arthur Roeder

President of the US Radium Corporation at the time of the Radium Girls scandal. Claimed Cecil Drinker had agreed to confidentiality about the condition of the girls who were falling victim in order to protect the interest of the corporation; he was the one that employed Drinker in the first place. He was fired after it was known that he had hid Drinker's report.



Katherine Wiley

Chairwoman of the National Consumers League during the Radium Girls case. She told *The New York World* about the plight of the girls; she is the one responsible for causing the fascination of the case for the general public.



Cecil Drinker

He visited the factory at the request of Arthur Roeder and was appalled by the conditions there, especially by the supervisors assuring the all-female workforce that the paint was safe, and even beautifying. He was the first one to directly link the ingesting of the paint by the girls as the cause of their problems, with him issuing an official report. Thanks to this report and the case, Radium-based paint was banned in the 1960s.



Madame Curie

A Polish physicist that discovered Radium and Polonium. In addition to discovering both, she developed methods for the separation of radium from radioactive residues to test its properties. Ironically, she promoted the miracle therapeutic uses of radium, but exposed to high levels of it at the age of 66 in 1934.



Harrison Martland

In 1924, he began

research on the effects of radioactive material on the human body; he determined that minute traces of radioactivity caused the death of the dial painters.



Sabin Arnold von Sochocky

Known for creating the world's first radium-based luminescent paint, called *Undark* that would be used by the *Radium Girls*; he was also the original president of the company.

Frederick Flinn

He was disguised as a specialist who declared Grace Fryer in being in fine health after examining her. In actuality, he was a toxicologist on the company's payroll who was the one to blame cases of radium poisoning as being caused by syphilis.

Impact of the Case

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P.P.E.

The United States Department of Labor started regulation of PPE (personal protection equipment) and “speak-out” campaigns after this case settled.

Discovery of *Radium Necrosis*



Defined as: the necrosis (death) of bone tissue due to exposure to radium. The most common type is *Radium Jaw*, which was brought on by the ingestion and subsequent absorption of radium. In the above photo of Amelia Maggia (one of the dial painters), *Radium Jaw* can clearly be seen.



Worker's Comp—Journalist of the early 20th century in the United States were the first to campaign for worker's composition. Most of the journalist who campaigned for this did so voluntarily. Thanks to this case, among others, worker's composition has been molded into the modern-day guidelines.

Radium Ads and Dial Painter Facts

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MÉTHODE THO-RADIA

EMBELLISSANTE PARCE QUE CURATIVE

4°

DENTIFRICE THO-RADIA

A BASE DE SELS DE THORIUM

FORMULE
du Docteur Alfred CURIE



Astringent et bactéricide, il stérilise la cavité buccale, évite et combat les gingivites, prévient la carie et les pyorrhées alvéolaires. Il assainit les dents, laisse dans la bouche une délicieuse impression de fraîcheur, conserve l'éclat, la blancheur et l'intégrité de la dentition.

Le grand tube :
6 francs

Pas de joli sourire sans de jolies dents

CHEZ LES PHARMACIENS EXCLUSIVEMENT

DRINK

Radio-Active Water From the Revigator

YOUR HEALTH IS YOUR WEALTH



THE REVIGATOR

THE WAY TO MAKE RADIUM WATER IN YOUR OWN HOME

RADIUM EMANATION WATER

Drives Out Uric Acid

Suffering from too much uric acid and diseases caused by faulty elimination—Rheumatism, Gout, Periodical Headaches, Neuralgia, Constipation, Neurasthenia, Auto-intoxication and Lack of Bodily Vigor—quickly relieved in a natural way without drugs or chemicals by our new discovery.

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with our Rayoyle. A little device containing Radium enough to supply a 200 Million Units of Radioactive-ity, in two quarts of water every twenty-four hours, for less than five a day. The Rayoyle will last a lifetime.

SEND FOR FREE LITERATURE

Write for your own list of cost a Rayoyle to make Radium Water in your own home, with your own ordinary drinking water.

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Le Rouge à Lèvres sain



Rouge à Lèvres THO-RADIA

ORANGÉ . FEU . VIF . MOYEN . FONCÉ .

ÉTUI COMPLET : 16' . RECHANGE : 8'

EN PHARMACIE SEULEMENT

Dial Painter Facts

Made \$.05 per watch,
which is about \$.27 today
Painter upwards of 200
watches per day
Pointed the brush with
paint using their lips to
sharpen the tip after
painting each number - 12
numbers per watch
Dawn of the 1920's had
about 4000 dial painters





Appendix Questions



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Can you think of a modern day story similar to the *Radium Girls*?

Can you think of other instances where corporations have taken advantage of workers?

What other fictional stories of seeking justice have you seen or read?

What do you think the news media is still sensationalized today?

How would you feel if you were one of the *Radium Girls*?

Activities

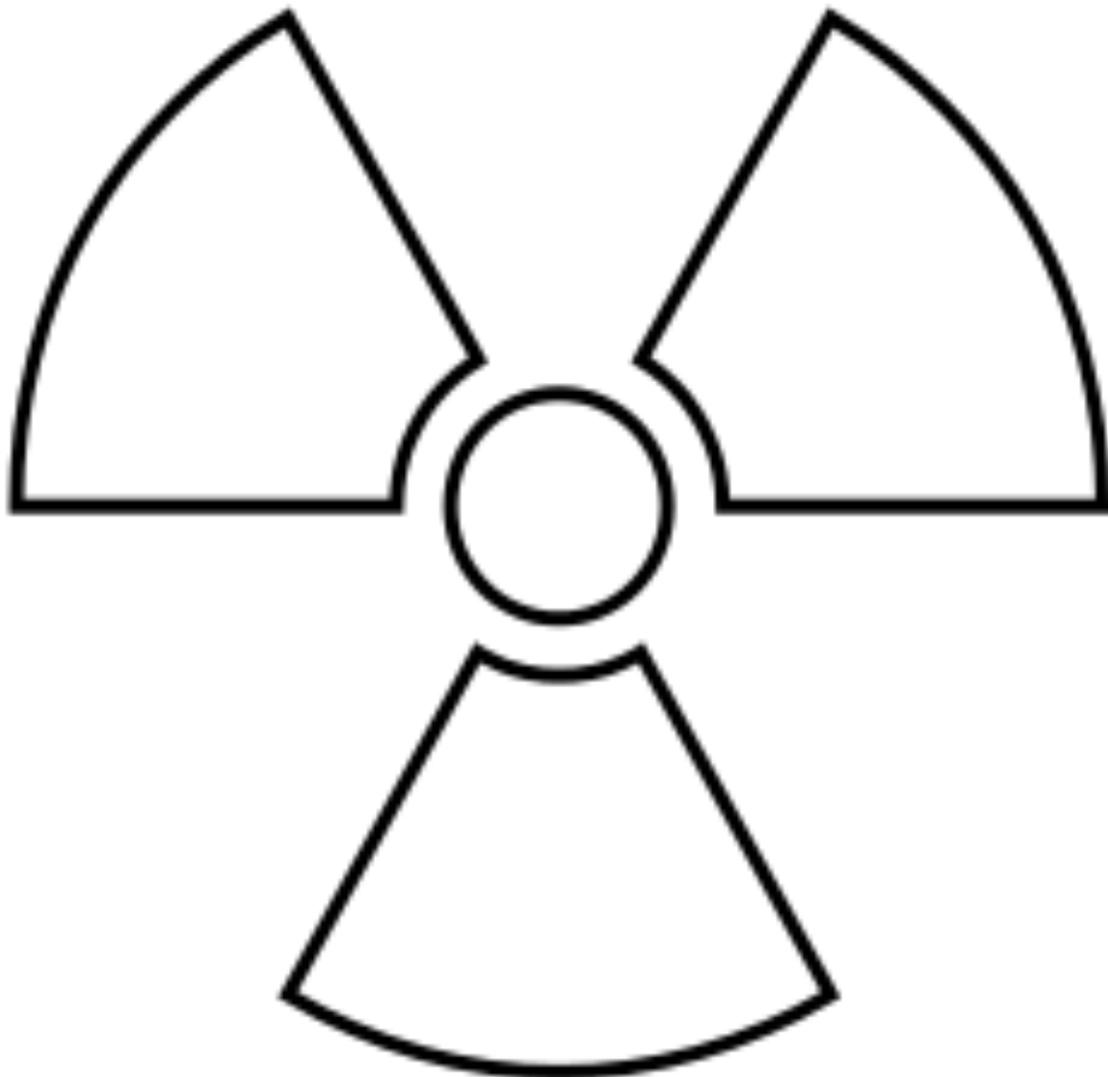


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Color your own radiation symbol!





Activities



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Create your own Radiation add! Bring it for us to look at when you come see the show!



Activities



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Matching: Match the name of the person to the person



Sabin Arnold von Sochocky

Katherine Schaub

Katherine Wiley

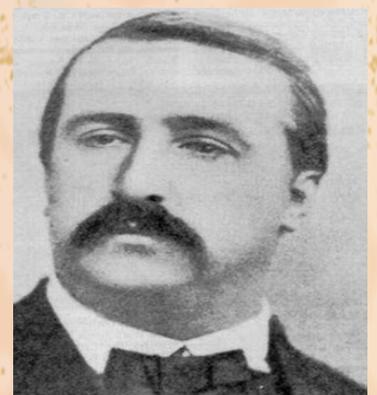
Grace Fryer



Madam Curie

Arthur Roeder

Cecil Drinker



Source Materials



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