

# **GOVERNMENT DEGREE COLLEGE RAJAMPETA**

## **DEPARMENT OF CHEMISTRY**

### **STUDENT ACHEVIMENTS**

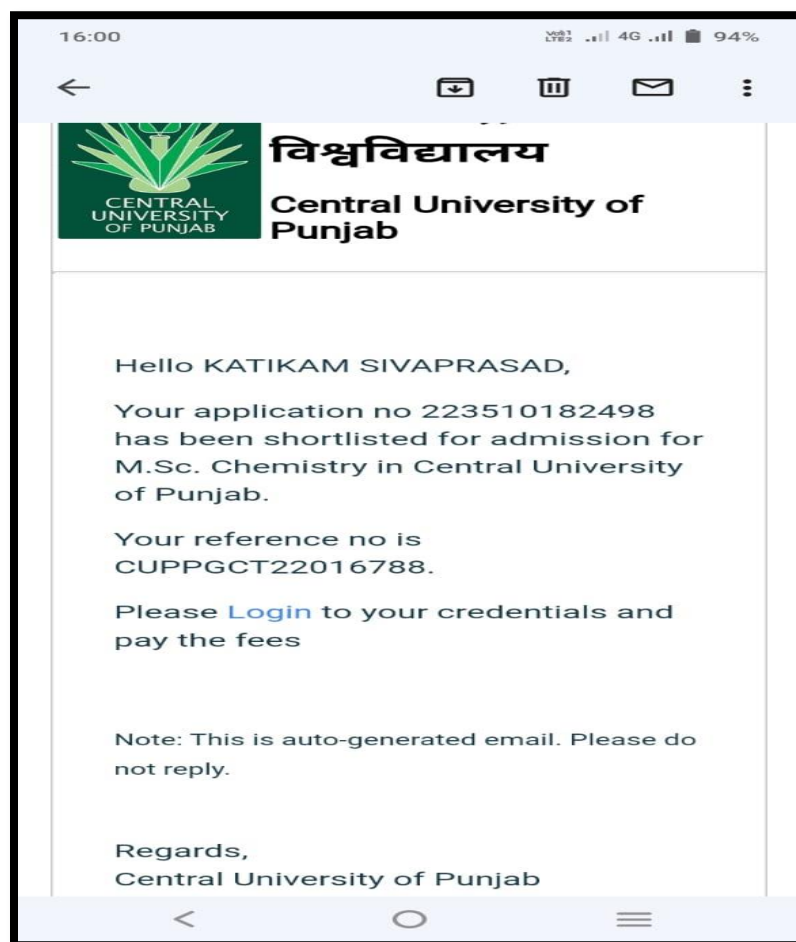


## **AP-PGCET FIRST RANK**

<b>1. Name of the Activity</b>	<b>FIRST RANK IN CHEMISTRY</b>
<b>2. Name of the Lecturer</b>	<b>Department of chemistry</b>
<b>3. Date</b>	<b>2021-2022</b>
<p><b>K.Siva Prasad got first rank in chemistry AP PGCET in2021-2022.</b></p> <p><b>Humanitarian Charitable Service Organization Rajampet has given by K.SIVA PRASAD a check of Rs.10,000/- today as an incentive and also promised to help in payment of fees.</b></p>	


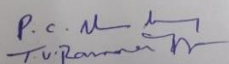
**K.Siva Prasad got first rank in chemistry AP PGCET in2021-2022.**

Humanitarian Charitable Service Organization Rajampet has given by K.SIVA PRASAD a check of Rs.10,000/- today as an incentive and also promised to help in payment of fees.





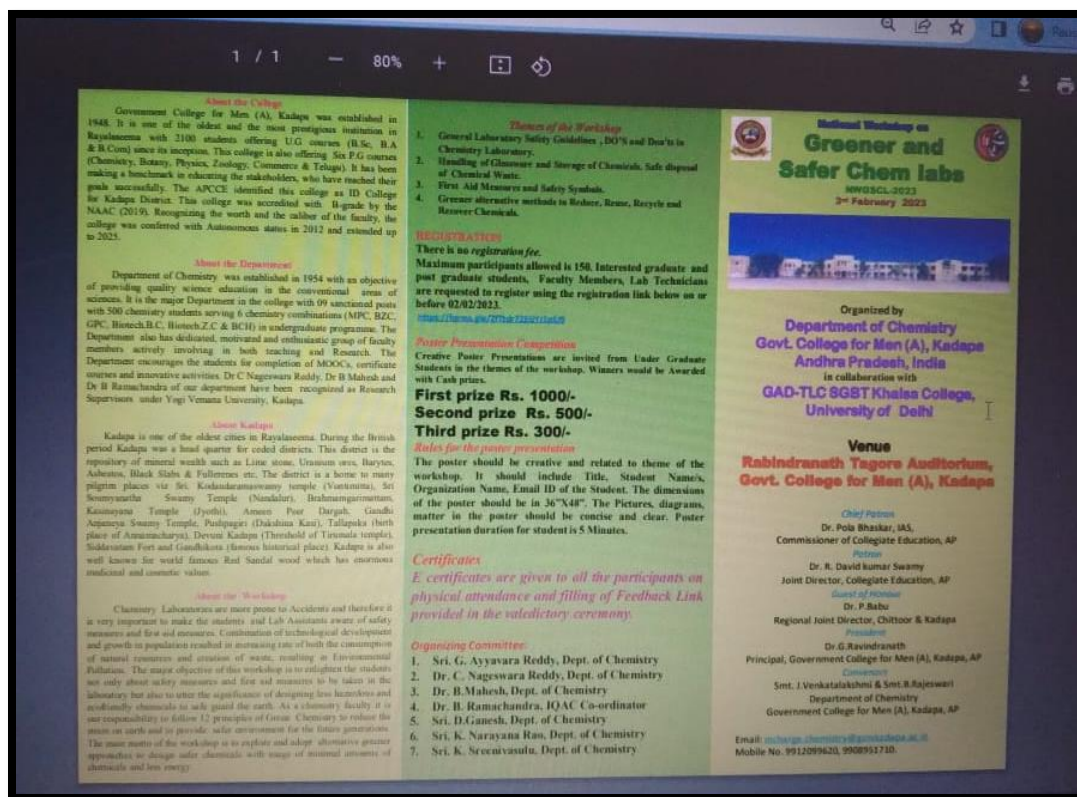
పి.జి. ఎంటర్ప్రైస్ లో మొదటి ర్యాంక్ సాధించిన బి. ఎస్సీ విద్యార్థి కె. శివప్రసాద్ కు నా ప్రయత్నం వల్ల మానవత స్వచ్ఛంద సేవా సంస్థ రాజంపేట వారు రూ.10,000/- ల చెక్ ను పేరోత్సాహంగా ఈ రోజు అందించడంతో పాటు ఫీజు చెల్లంపునకు కూడా సహాయం చేస్తామని హామీ ఇచ్చారు. సంస్థ వారికి ధన్యవాదాలు.

 <b>ANDHRA PRAGATHI GRAMEENA BANK</b> MAIN BRANCH, RAJAMPETA (2076) Main Road, Rajampet Mandal, Kadapa Dt - 516 115. IFS Code : APGB0002076		VALID FOR THREE MONTHS ONLY <b>31102022</b> D D M Y Y Y	
Pay		या धारक को or Bearer	
रुपये Rupees <b>TEN THOUSANDS RUPEES ONLY</b> अदा करें ₹ <b>10,000/-</b>			
A/c No. <b>91068859547</b>			
P.O. M.  మానవత (శాంతి జవనం) స్వచ్ఛంద సేవా సంస్థ రె.నెం. 402/2004, రాజంపేట వారు కడప జిల్లా			
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## **SECOND PRIZE IN NATIONAL WORKSHOP**

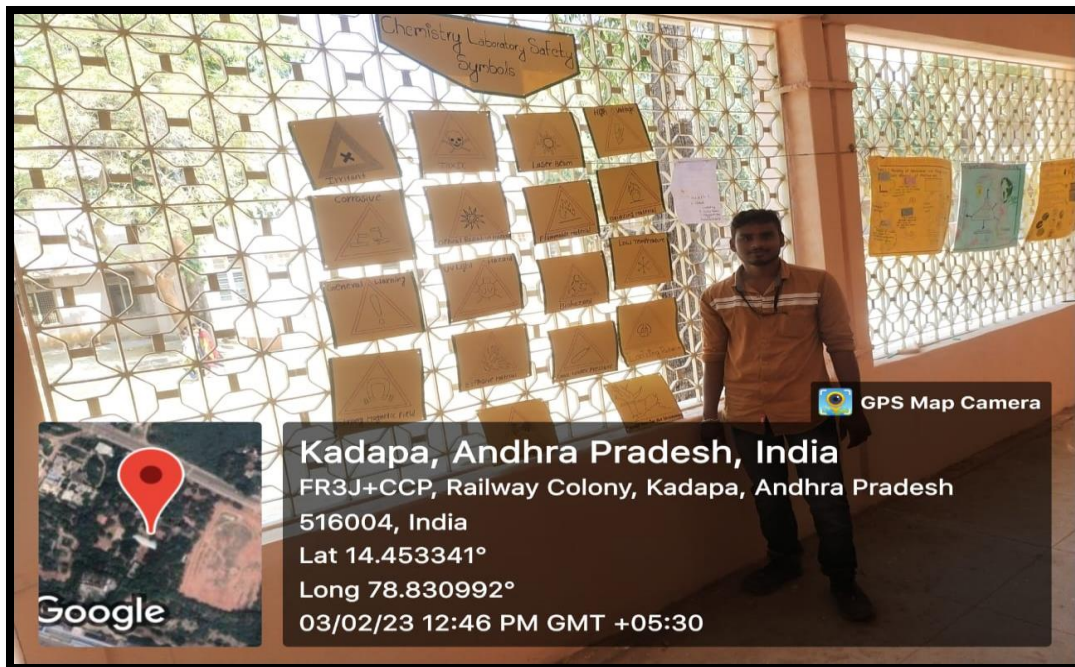
<b>1. Name of the Activity</b>	<b>SECOND PRIZE IN NATIONAL WORKSHOP</b>
<b>2. Name of the Lecturer</b>	<b>Department of chemistry</b>
<b>3. Date</b>	<b>2022-2023 (03.02.2023)</b>
<p><b>On 03 February 2023, Organized by Department of Chemistry Govt. College for Men (A), Kadapa Andhra Pradesh, India in collaboration with GAD-TLC SGBT Khalsa College, University of Delhi National workshop on Greener and Safer Chem labs.</b></p> <p>The BSC class are participated in the workshop nearly 50 members. The students are participated more actively. The students know the different kinds of thinking and also understand the importance of <b>Greener and Safer Chemistry labs</b>. Students understand the how can maintain the chemistry labs and also importance of chemistry symbols. In this work shop our student Y.Rajesh got second prize 500/-Rupees.</p>	

**Organized by Department of Chemistry Govt. College for Men (A), Kadapa Andhra Pradesh, India in  
collaboration with GAD-TLC SGBT Khalsa College, University of Delhi**







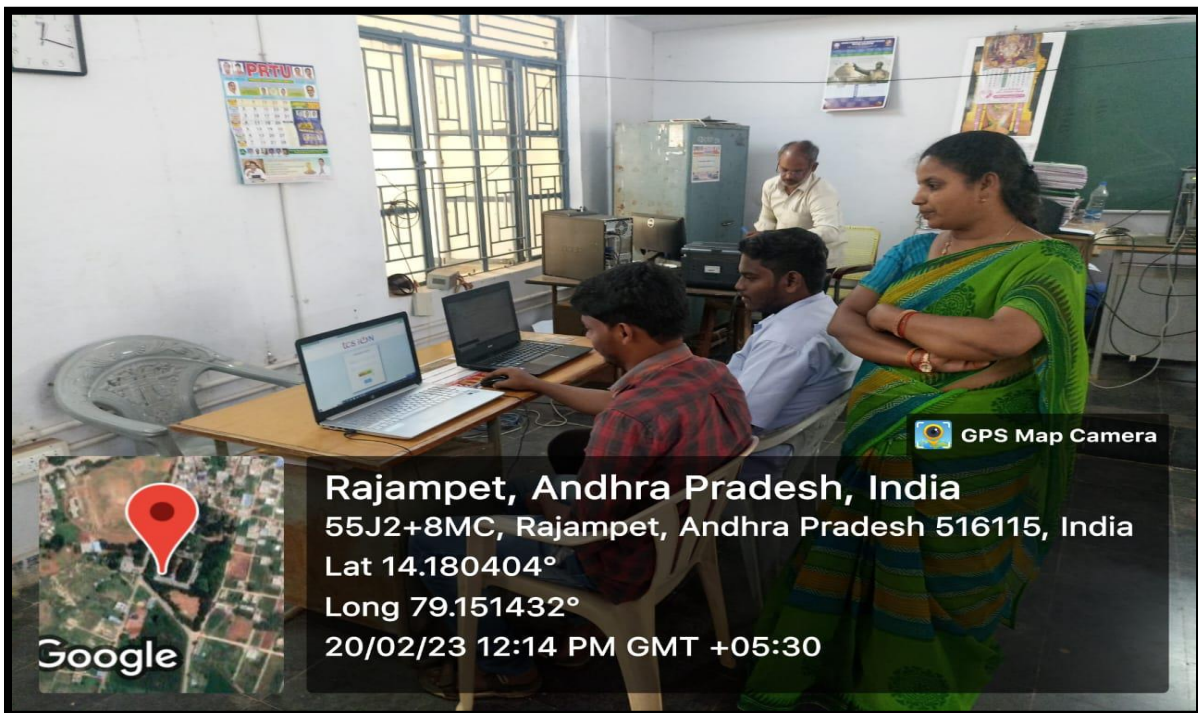




## **STUDENT PARTICIPATION ON APSCHE QUIZ**

### **CHAMPIONSHIP 2023**

1. Name of the Activity	APSCHE QUIZ CHAMPIONSHIP 2023
2. Name of the Lecturer	B.Sailaja
3. Date	20.02.2023
4. Number of students participated	02
5. Number of faculty involved	01
6. Brief Report:	<p>On 22 February 2023, our APSCHE organized Quiz . The III BSC students are participated in the Quiz program me on nearly 2 members. The students are participated more actively. The students know the different kinds of thinking and also understand the how manage the timing in online Quiz. The students are login in quiz staff presence,</p>



## STUDENT PARTICIPATED NATIONAL CONFERENCE

1. Name of the Activity	STUDENT PARTICIPATED NATIONAL CONFERENCE
2. Date	FEB-24 <sup>th</sup> & 25 <sup>th</sup> - 2023
3.Venue	GOVERNMENT COLLEGE FOR MEN (ARTS) ,KADAPA.
4. Number of students participated	02
5.. Aim & Objectives:	<p>The conference is to imparting new skills and knowledge for students. A candidate who goes through the process gains clarity of student own thoughts, views and opinion. Generate more ideas and a structured presentation of a topic. To learn by examples by providing feed back to each other.</p>
6. Brief Report	<p>Our students Participated to National Conference on Feb--24<sup>th</sup> &amp; 25<sup>th</sup> – 2023 at Government degree college Men Arts- Kadapa.</p> <p>The Students participated in the s program me and Presented to paper Effect of acid rain. To bring changes in attitude. To Practice these methods by developing and presenting a unique Conference of their own. Student paper published in ISBN BOOK.</p>





#### Abstracts Format

Abstracts not more than 300 words are to be submitted to the convenor through e-mail: [ncpcse2023@gmail.com](mailto:ncpcse2023@gmail.com). The interested participants are requested to submit their abstracts (MS word, Times New Roman, font size 12, 1.5 line spacing) including title (1.4, bold, centered), name of author (s), author's affiliation (s) (12, centered) and email id (10, centered). The name of the presenting author must be underlined. One author should not submit more than one abstract. The soft copy of the abstract should be sent to the convenor on or before 02-02-2023, no abstract will be considered after that.

Authors are requested to send original full length papers on or before 07.02.2023. The papers should be sent to the email: [ncpcse2023@gmail.com](mailto:ncpcse2023@gmail.com). Registration is mandatory for paper presentation and to publish full article in the conference volume. Based on the technical committee recommendations after applying plagiarism, papers will be selected and published in the conference volume with ISBN number.

**Abstract Last Date : 02.02.2023**  
**Full length Paper Last Date : 07.02.2023**

#### REGISTRATION AMOUNT

Faculty Rs. 400/-  
Students & Research Scholar Rs. 200/-  
Email to submit Abstract & Full Length Papers  
[Email:ncpcse2023@gmail.com](mailto:Email:ncpcse2023@gmail.com)

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#### Address for Correspondence

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Phone No: +91 9848632819 | 8919781708



## ICSSR SPONSORED Two Days National Conference on **Pollution Control and Sustainable Environment** NCPCE-2023 February 24<sup>th</sup> & 25<sup>th</sup>, 2023



Organized by  
**Department of Chemistry**  
Govt. College for Men (A),  
Kadapa, AP, India, Pin - 516 004

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#### Organising Secretary

**Dr. C. Nageswara Reddy**  
Dept. of Chemistry, Govt. College for Men (A), Kadapa, A.P.

#### About the College

Government College for Men (A), Kadapa was established in 1948. It is one of the oldest and the most prestigious institution in Rayalaseema with 2100 students offering U.G (B.Sc, B.A & B.Com) since its inception and Six P.G courses in Chemistry, Botany, Physics, Zoology, Commerce & Telugu. It has been making a benchmark in educating the stakeholders, who have reached their goals successfully. The APCCE identified this college as ID College for Kadapa District. This college was accredited with B-grade by the NAAC (2019). Recognizing the worth and the calibre of the faculty, the college was conferred with Autonomous status in 2012 and UGC, extended up to 2025.

#### About the Department

Department of Chemistry was established in 1954 with an objective of providing quality science education in the conventional areas of sciences. It is the major department in the college with 09 sanctioned posts with 500 chemistry students serving 6 chemistry combinations (MPC, BZC, GPC, BCBioTech, ZCBioTech & BCH) in undergraduate programme. The department also has dedicated, motivated and enthusiastic group of faculty members actively involving in both teaching and research. The Department encourages the students for completion of MOOCs, certificate courses and innovative activities.

#### About Kadapa

Kadapa is one of the oldest cities in Rayalaseema. During the British period Kadapa was a head quarter for ceded districts. This district is the repository of mineral wealth such as Lime stone, Uranium ores, Barytes, Asbestos, Black Slabs & Fullerenes etc. The district is a

home to many pilgrim places viz Sri Kodandarama Swamy Temple (Vontimitta), Sri Soumyanatha Swamy Temple (Nandalur), Brahman Gari Matam, Kasinayana Temple (Jyothi), Ameen Peer Dargah, Gandhi Anjaneya Swamy Temple, Pushpagiri (Dakshina Kasi), Tallapakka (birthplace of Annamacharya), Devuni Kadapa (Threshold of Tirumala temple), C.P. Brown Library and Gandikota (famous historical place). Kadapa is also well known for world famous Red Sandal wood which has enormous medicinal and cosmetic values.

#### About the Conference

Department of Chemistry, Govt. College for Men (A), Kadapa, is organizing 'National conference on Pollution Control and Sustainable Environment' (NCPCE-2023) on Feb 24 to 25, 2023. The conference intends to attract students, researchers and scientists from all over the world in various domains of environmental science, chemistry, biology and engineering to share their work through stimulating discussions. To address the progressive impacts of environment change, there is an urgent need to adopt innovative approaches that integrate both technology and nature to enhance the resilience. The conference aims to evolve the best environmentally sustainable practices for future generations and to assess their relevance in reducing pollution and climate adaptations. This conference also focuses on new technologies and advanced approaches in the emerging area of green technology, adaptation strategies to address environment induced hazards. The concern of the Environmental quality is a big issue in the current world because of increasing urbanization, industries and vehicular pollution as well as pollution of water resources due to effluent discharge without meeting to the environmental standards.

Pollution abatement conference is a forum to explore issues of mutual concern as well as exchange of knowledge, share ideas and generate solutions. The conference is all about pollution abatement using advanced technologies to control and regulate pollution to attain the sustainable environment.

This conference is intended to improve the sustainability of the environment. The broad field of sustainable environment and pollution prevention management includes The major thematic areas (but not limited to) of the conference are listed below.

#### Areas of the Conference

- Air pollution and treatment
- Climate change adaptation technology
- Emerging environmental contaminants
- Environmental systems modelling
- Environmental management and health risk
- Environmental nanotechnology
- Environmental impact assessment and life cycle analysis
- Green manufacturing and technologies, pollution prevention
- Greenhouse effect, global warming, and climate change
- Urban waste management
- Global warming and greenhouse gas mitigation
- Natural resources conservation and management
- Pollution and health issues
- Renewable energy technology
- Soil Pollution and treatment
- Sustainable low carbon economy
- Water resources and its efficient utilization
- Biological Sciences
- Physical Sciences
- Material Sciences
- Environment and Sustainable development



ICSSR SPONSORED  
Two Days National Conference  
ON

Pollution Control and Sustainable Environment  
(During February 24-25, 2023)

Department of Chemistry  
Govt. Degree College for Men(A), Kadapa, A.P.,  
India- 516004



Indian Council of  
Social Science Research

**Dr. G. Ravindranath**  
**Principal**

**Organizing Secretary**

Dr. C. Nageswara Reddy  
E-mail – ncpse2023@gmail.com  
Ph: 9848632819

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To  
Y.Rajesh, III MPC,  
Department Of Chemistry ,  
GDC Rajampeta Kadapa Dist, A.P., India.

Sir/Madam,

I am happy to inform you that your paper entitled “**Effects of Acid Rain in Environment**” in the authorship of Y.Rajesh, has been accepted for the presentation in the National Conference NCPCSE - 2023.

Looking forward to meet you in the Conference.

Dr. C. Nageswara Reddy  
Organizing Secretary – NCPCSE-2023  
Department of Chemistry  
Govt. Degree College for Men(A),  
Kadapa, A.P., India- 516004



## EFFECTS OF ACID RAIN IN ENVIRONMENT

Y.RajeshO III MPC, B.Sailaja,Lecturer in chemistry

Department Of Chemistry ,GDC RAJAMPETA KADAPA DIST

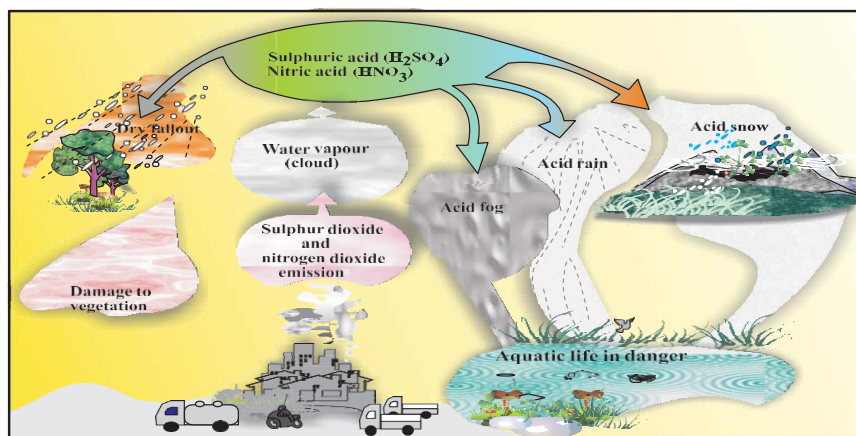
"Acid rain" is a broad term referring to a mixture of wet and dry deposition (deposited material) from the atmosphere containing higher than normal amounts of nitric and sulfuric acids. The precursors, or chemical forerunners, of acid rain formation result from both natural sources, such as volcanoes and decaying vegetation, and man-made sources, primarily emissions of sulfur dioxide ( $\text{SO}_2$ ) and nitrogen oxides ( $\text{NO}_x$ ) resulting from fossil fuel combustion. In the United States, roughly 2/3 of all  $\text{SO}_2$  and 1/4 of all  $\text{NO}_x$  come from electric power generation that relies on burning fossil fuels, like coal. Acid rain occurs when these gases react in the atmosphere with water, oxygen, and other chemicals to form various acidic compounds. The result is a mild solution of sulfuric acid and nitric acid. When sulfur dioxide and nitrogen oxides are released from power plants and other sources, prevailing winds blow these compounds across state and national borders, sometimes over hundreds of miles.

**Causes of acid rain:** Acidic precipitation can be caused by natural (volcanoes) and man-made activities, such as from cars and in the generation of electricity. The precursors, or chemical forerunners, of acid rain formation result from both natural sources, such as volcanoes and decaying vegetation, and man-made sources, primarily emissions of sulfur dioxide ( $\text{SO}_2$ ) and nitrogen oxides ( $\text{NO}_x$ ) resulting from fossil fuel combustion. The burning of fossil fuels (coal and oil) by power-production companies and industries releases sulfur into the air that combines with oxygen to form sulfur dioxide ( $\text{SO}_2$ ). Exhausts from cars cause the formation of nitrogen oxides in the air. From these gases, airborne sulfuric acid ( $\text{H}_2\text{SO}_4$ ) and nitric acid ( $\text{HNO}_3$ ) can be formed and be dissolved in the water vapor in the air. Although acid-rain gases may originate in urban areas, they are often carried for hundreds of miles in the atmosphere by winds into rural areas. That is why forests and lakes in the countryside can be harmed by acid rain that originates in cities.

**Effects of acid rain:** The environment can generally adapt to a certain amount of acid rain. Often soil is slightly basic (due to naturally occurring limestone, which has a pH of greater than 7). Because bases counteract acids, these soils tend to balance out some of the acid rain's acidity. But in areas, such as some of the Rocky Mountains and parts of the northwestern and southeastern United States, where limestone does not naturally occur in the soil, acid rain can harm the environment.

Some fish and animals, such as frogs, have a hard time adapting to and reproducing in an acidic environment. Many plants, such as evergreen trees, are damaged by acid

rain and acid fog. I've seen some of the acid-rain damage to the evergreen forests in the Black Forest of Germany. Much of the Black Forest was indeed black because so much of the green pine needles had been destroyed, leaving only the black trunks and limbs! You also might notice how acid rain has eaten away the stone in some cities' buildings and stone artwork.



**Acid rain and stone:** When you hear or read in the media about the effects of acid rain, you are usually told about the lakes, fish, and trees in New England and Canada. However, we are becoming aware of an additional concern: many of our historic buildings and monuments are located in the areas of highest acidity. In Europe, where buildings are much older and pollution levels have been ten times greater than in the United States, there is a growing awareness that pollution and acid rain are accelerating the deterioration of buildings and monuments.

Stone weathers (deteriorates) as part of the normal geologic cycle through natural chemical, physical, and biological processes when it is exposed to the environment. This weathering process, over hundreds of millions of years, turned the Appalachian Mountains from towering peaks as high as the Rockies to the rounded knobs we see today. Our concern is that air pollution, particularly in urban areas, may be accelerating the normal, natural rate of stone deterioration, so that we may prematurely lose buildings and sculptures of historic or cultural value.

## REFERENCE BOOKS:

Environmental Chemistry B.K Sharma

Environmental Chemistry: A global perspective 3rd Edition

Gary W. van Loon (Author), Stephen J. Duffy (Author)

[www.epa.gov/acidrain/what/](http://www.epa.gov/acidrain/what/)

[environment.nationalgeographic.com/.../global.../acid-rain-overview/](http://environment.nationalgeographic.com/.../global.../acid-rain-overview/)

URL: <http://water.usgs.gov/edu/acidrain.html>

