

B L.D. E. Association's

**S. B. ARTS AND K. C. P. SCIENCE**  
**COLLEGE, BIJAPIJR**

**PG DEPARTMENT OF CHEMISTRY**

Report

on

**INDUSTRIAL TOUR**  
**REPORTS**

**2017-18**

## INDUSTRIAL TOUR REPORT

PG Department of Chemistry-Visited at "POORNAPRAJNA INSTITUTE OF SCIENTIFIC RESEARCH CENTRE BANGALORE" in 2018

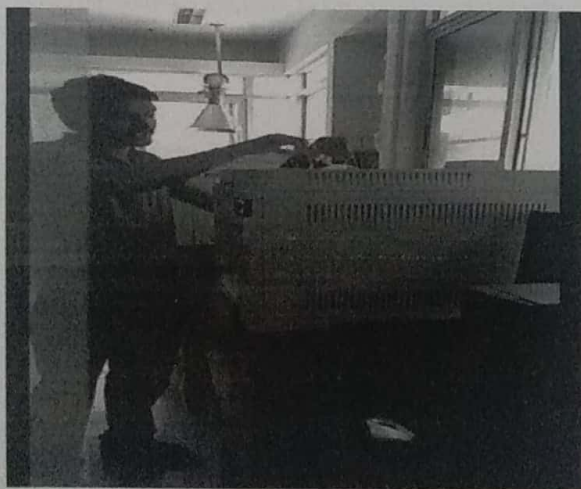
**"To acquire knowledge one must study but to acquire wisdom one must travel and observe"**

BLDEA's, SB Arts & KCP Science, Vijaypur had organized an industrial tour on 11.03.2018. The visit was organized with prior permission and Guidance by the Principal, Dr. K.J. Pujari, HOD Dept. of Chemistry, Dr. M. I. Kumabar and the Coordinator Dr A S Pujar.

On 12.03.2018 to 17.3.2018 we 25 students and 4 faculty went for industrial visit to **Poorna Prajna Institute of Scientific Research centre [PSIR]** located at Bangalore, which was founded by H.H.Sri Vibudhesh Teerth swamiji of Udupi Sri Admar Mutt. In that institution we got knowledge about various ongoing projects like acetic acid production, analysis of protein structure, antibiotic activity of fungi etc also we have seen specialized equipments on which researchers and PHD scholars

### THE INSTRUMENTS WE HAVE SEEN IN THAT INSTITUTION ARE:

#### 1.FLAME PHOTOMETRY



It is one of the spectral technique which is used for estimation of elements in the sample both qualitatively and quantitatively . This technique involves spraying of liquid sample to flame which causes excitation of atom while returning to ground state each atom emits characteristic radiation which fall in visible region of light

## 2. GAS SENSOR



In the same institution we have also seen the gas sensor equipment. Chetana madam explained about gas sensor (also called gas detector) that detects the poisonous gas emitted from automobiles and also used to check whether newly synthesized material detects any poisonous gas like  $\text{SO}_2$ . In that instruments sample will be made in the form of pellets, when gas comes in contact with sample conductance or resistance of sample changes and corresponding peak is observed in the monitor and lanthanum oxide is used as a sample.

## 3. X-RAY



#### 4. GAS REACTOR



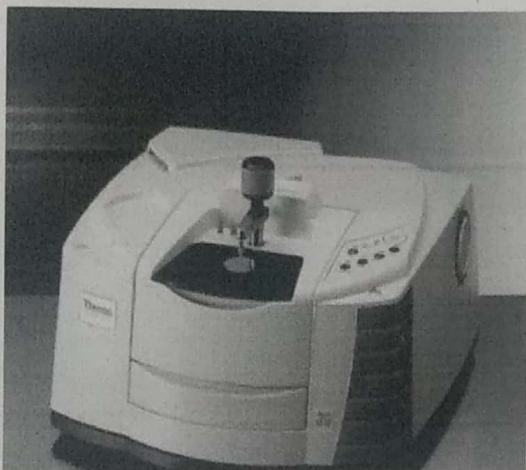
Various gas phase reactions are carried out in this reactor where reactants are used in gaseous form which passes through catalyst placed at centre of cylinder. along with reactant carrier gas is also used. Product obtained is condensed by passing through condenser. Temperature of reaction is mentioned at 700-800 ° C depending upon type of reaction .

#### 5. GAS CHROMATOGRAPHY



It is important gas separation technique. Based on principle of TLC, composition of various gas samples separated using this technique. There we observed a demo of separating mixture of samples containing tributyl phenol, hexanol, and solvents like cyclohexane and tributyl alcohol. First peak obtained was solvents, various peaks observed after this.

## 6. IR SPECTROSCOPY



It was seen that in this technique only IR radiation was used in the functional group analysis because bond frequency of any organic or inorganic compound completely matches with that of IR. and only IR radiation is useful in stretching the bond, other than IR if any radiation used may break the bond. usually KBr pellets are used in IR as KBr binds nicely with sample and it has low stretching frequency with 425 nm.

### ACKNOWLEDGEMENT

Apart from that Institution we also visited many places like Mysore palace , Chamundi hills ,Balmuri falls ,Abbe falls, Gokarna ,muradeshwar, Om beaches where we enjoyed lot and also many religious places of karnataka like Dharmasthala, Sringeri ,Horanadu, Muradeshwar, Idagunji Ganesh temple and the visited most beautiful place Madikeri, which is well also known as Kashmir of Karnataka, A successful educational trip is by teamwork along with the coordination of all our teachers. So we would like to express the deep sense of gratitude for our respected principal Dr K.G.Pujari sir for giving us permission for this trip and also we express a special thanks to Dr A.S.Pujari sir and Dr M.Y.Yadave sir for their effective guidance. And also Heartly thankful for our teachers Dr

DHARMASTHALA



TALAKAVERI



BALMURI FALLS



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