

National Workshop on Operation and Maintenance of Opto Analytical Laboratory Equipments (NWOMOLE, 2020)

6–10 January, 2020

A Report

We all know science grows with experimentation and experiments are largely dependent on instruments and latest techniques. In order to bridge the gap between the concepts and their applications, the continuous training is necessary to enhance the technical skills of all the professionals. In view of this Govt D.B. Girls' P.G. (Autonomous) College, Raipur has organized a five day national workshop on Operation and Maintenance of Opto Analytical Laboratory Equipments in association with Western Regional Instrumentation Centre, Mumbai (*National Facility Centre for Instrumentation of UGC, New Delhi*) from 6-10 January, 2020. The motive behind organizing this workshop is the fact that most of the faculties/technicians in colleges are not trained adequately on the repair/maintenance of laboratory equipments abandoned due to very minor issues, which can be easily attended with little orientation about their proper upkeep and maintenance. Further, due to inadequate knowledge the money spent on repairs and maintenance of these equipments is large which can be avoidable to a great extent and also save the unnecessary long lead time for repairs. This will smoothen the functioning of laboratories and our student will be the biggest beneficiary of the same.

Total 47 participants including the teaching faculty (30), laboratory technicians (12) and researcher scholars (05) participated in the this workshop.

The program curriculum has been specifically designed for technical and scientific staff of science departments of the college. The program aimed at imparting skills in operation, maintenance and repairs of laboratory instruments commonly used in science laboratories i.e. Physics, Chemistry and Biological Sciences.

Following activities have been carried out during the workshop by the lectures from WRIC experts followed by hands on training programme

1. Introduction to the basic of electric and electronic equipments and components.

2. Awareness and requirement of general repairs and maintenance of laboratory instruments.
3. Repairing of electrical instruments like, hot plate, heating mantel, magnetic stirrer and water bath.
4. Working, proper handling and repairing of temperature controlled oven, incubator and water bath.
5. Working principle, repairing, maintenance and calibration of pH meter, pH electrode, colorimeters, flame photometer, spectrophotometer, conductivity meter, cell counter, cryostat, deep freeze, laminar flow, flame photometer, UV spectrophotometer.
6. Operation, repairing and maintenance of optical Microscope and analytical balance.
7. Working principle and repairing of electronic instruments, like transistors, Op. amplifier, LCR circuit, rectifier circuit etc.

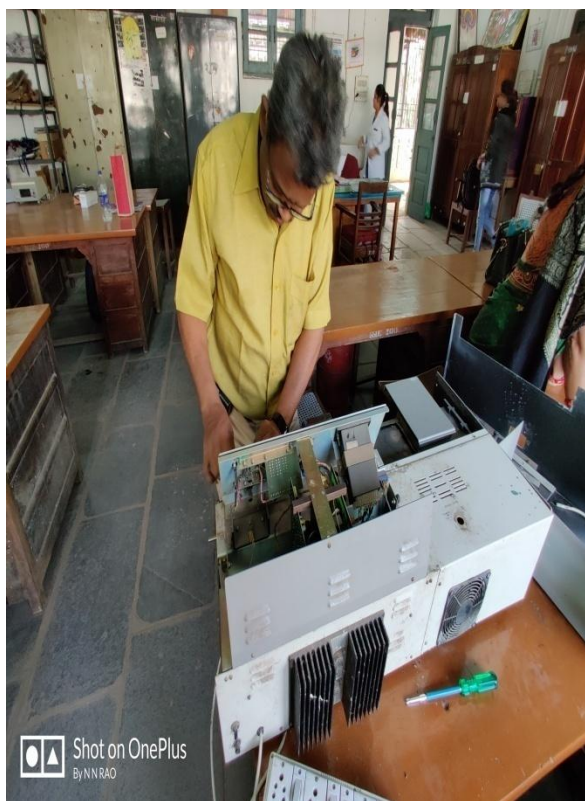
The inauguration session was organized on 06.01.2020 at 10:30 a.m. Honorable Dr. S.K. Patil, Vice-Chancellor, Indira Gandhi Agriculture University, Raipur was present as a chief guest in the inaugural session. The opening ceremony was presided over by Dr. J.N. Verma, Principal. Mr. K.K. Mahajan and Mr. N. Nageswar Rao, WRIC, Mumbai graced the opening ceremony as the Guest-of-Honor. The dignitaries on the dais were welcomed with a plant sapling. Principal of the college, Dr. J.N. Verma welcomed all the participants. Convener of the workshop, Dr. Maya Shedpure delivered an introductory speech. The participants were introduced to the concept of the workshop and support extended by the Western Regional Instrumentation Centre, Mumbai. Dr. Madhu Shrivastava presented introduction of the different science departments of the college. Mr. K.K. Mahajan and Mr. N. Nageswar Rao, then gave information about the aim and role of WRIC, Mumbai in providing support to higher education institutes all over the nation. Then, Chief-Guest, Dr. S. K. Patil expressed his views on the organization of such workshop with the support and help from WRIC, Mumbai and the overall scenario of status of equipment's maintenance and repair in science laboratories in India. Prof. Patil highlighted the need for frequent organization of such workshops in various higher education institutes for development of science laboratories in general. Prof. Patil expressed his best wishes for the participants and the organizers.



The chief guest was felicitated by offering shawl, shreephala and a memento. All distinguished delegates and resource persons from WRIC, Mumbai were also felicitated by a memento.

The opening ceremony of the workshop was attended by distinguished resource persons Ms. Sunita Batra, Mr. Sudhir Kumar, Mr. Milind Shidruk and Mr. Devendra Gunde from WRIC Mumbai. Dr. M.L. Verma, organizing secretary of the workshop presented vote of thanks.

The inaugural ceremony was followed by the guest lecture from Mr. K.K. Mahajan on regulated power supply and function generation and from Ms. Sunita Batra on basic electronic components continued by Lab session till 7:30 p.m. On 7.1.2020 and 8.1.2020 guest lectures delivered by Mr. N.Nageswar Rao on pH meter, conductivity meter, colorimeter and spectrophotometer; on 9.1.2020 guest lecture delivered by Mr. Milind Shidruk on microscopy and on 10.1.2020 guest lecture delivered by Sudhir Kumar on maintenance of electrical instruments. On each day, technical session started at 9:30 am with guest lecture followed by hands-on training in the laboratories. All the lectures were very nice and played significant role in understanding the working of various laboratory instruments. In addition, hands-on training during lab session was most important and beneficial part of the workshop for all the participants. During the lab sessions of this 5 day workshop, about 158 instruments from different laboratories got repaired





with the help of learned, skilled experts from WRIC, Mumbai. In fact, every participant gets amazed to know that most of these instruments were not in use due to very minor defects and can be solved easily. It was a historical event organized in this college and a golden opportunity for all the participants of the workshop.

The technical sessions were organized with necessary breaks between sessions for tea/ high tea, lunch, dinner, etc.

On 10 January 2020, after the technical sessions, the valedictory function was organized. The dignitaries on the dais were Dr. J.N. Verma, Principal as a Chief Guest, Mr. K.K. Mahajan and Mr. N.N. Rao as Guest-of-Honor, Dr. Madhu Shrivastava, Dr. Maya Shedpure, Convener and Dr. M.L. Verma, Organizing secretary.

Dr. J.N. Verma expressed his satisfaction about the overall proceedings of the workshop. He was also pleased to all the resource persons from WRIC for their kind help and support without which it would not have been possible to organize such a wonderful event.

From the verbal feedback, participants expressed their views and appreciated the efforts taken by Dr. Maya Shedpure and experts from WRIC to make this workshop successful and memorable.

The participants were very much happy about the overall hospitality and most importantly the activities of the workshop. Everyone expressed that they are benefitted like they could interact with the experts and learn the easy operation, maintenance and repair of various laboratory instruments. At the end, Dr. M.L. Verma, organising secretary of the workshop presented the vote of thanks and expressed his emotions about the gathering. The programme concluded with the college song.

The financial support received from the autonomous cell of the college is gratefully acknowledged.

The organizers were really fortunate to have highly skilled, sincerely devoted all the eminent resource persons from WRIC, Mumbai.

The workshop was given wide press coverage by both the print and digital media (television).

In all the workshop was very successful academically as well as socially.

Dr. Maya Shedpure, Convener
Dr. M.L. Verma, Organizing Secretary

Dr. J. N. Verma
Principal

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Dr. S.K. Patil, Vice-Chancellor, Indira Gandhi Agriculture University, Raipur was present as a chief guest in the inaugural session.



During the lab sessions of this 5 day workshop, about 158 instruments from different laboratories got repaired with the help of learned, skilled experts from WRIC, Mumbai. In fact, every participant gets amazed to know that most of these instruments were not in use due to very minor defects and can be solved easily. It was a historical event organized in this college and a golden opportunity for all the participants of the workshop.

Dr. Maya Shedpure, Convener; Dr. M.L. Verma, Organizing Secretary















में रेलवे ने टॉस जीतकर छत्तीसगढ़ को पहले बल्लेबाजी के लिए आमंत्रित किया था। मैच के दूसरे दिन सोमवार को छत्तीसगढ़ अपनी पहली

57 और साहम हसन का नाबाद 82 रन की पारियों के बदौलत 57 ओवर में 5 विकेट पर 202 रन का स्कोर खड़ा करने में कामयाब रही।

कलरा का 80 रन का साझेदार का बदौलत 35 ओवर में 4 विकेट पर 175 रन का संघर्षपूर्ण स्कोर खड़ा किया। इनके अलावा बरखा

जवाब में बल्लेबाजी करने उतरी रीवा विवि को रवि वि की गेंदबाज खुलकर नहीं खेलने दिया, जिसके

रवि वि ने लिया। गायकवा

CITYLIVE

डीबी गलर्स कॉलेज में ऑपरेशन एंड मेंटनेंस ऑफ ऑप्टो एनालिटिकल लैबोरेट्री विषय पर कार्यशाला

मुंबई से आए एक्सपर्ट ने बताया लैब इक्युपमेंट के रखरखाव के तरीके

पत्रिका PLUS रिपोर्टर

रायपुर • शासकीय दूधधारी बजरंग महिला स्नातकोत्तर महाविद्यालय में 6 से 10 जनवरी तक पांच दिवसीय राष्ट्रीय कार्यशाला का आयोजन किया जा रहा है। सोमवार को कार्यक्रम के उद्घाटन सत्र में मुख्य अतिथि के रूप में इंदिरा गांधी कृषि विश्वविद्यालय के कुलपति डॉ. एसके पाटिल पहुंचे थे। कार्यक्रम की अध्यक्षता प्राचार्य डॉ. जेएन वर्मा ने की। कार्यक्रम में कोर्स कोऑर्डिनेटर के रूप में मुंबई से आए विषय विशेषज्ञ केके महाजन और एन नागेश्वर राव को बुलाया गया है।

महाविद्यालय की सह प्राध्यापक कल्पना मिश्रा ने बताया कि कार्यशाला का विषय ऑपरेशन एंड मेंटनेंस ऑफ ऑप्टो एनालिटिकल लैबोरेट्री रखा गया है। इसे वेस्टर्न रीजनल इंस्ट्रुमेंटेशन सेंटर मुंबई के सहयोग से आयोजित किया जा रहा है। मुंबई से आए विषय विशेषज्ञ नागेश्वर राव व केके महाजन ने कहा कि वह सब के सहयोग से ऐसे उपकरणों को ठीक करेंगे। इस दौरान उनके द्वारा 1 घंटे का सिद्धांत व्याख्यान व 5 घंटे की प्रायोगिक कक्षाएं भी आयोजित की जाएंगी।



महाविद्यालय की प्राचार्य डॉ. जेएन वर्मा ने कहा कि इस कार्यशाला से महाविद्यालय को बहुत लाभ होगा। साथ ही महाविद्यालय के लैब के उपकरणों को समय पर सुधार कर निरंतर कार्य किया जा सकेगा। कार्यक्रम की संयोजिका डॉ. माया शेंदपुरे ने कहा कि विज्ञान के क्षेत्र में कार्य संपन्न करने में उपकरणों का महत्वपूर्ण योगदान है। यह कार्य को सरल और प्रामाणिक करने में सहायता प्रदान करते हैं। महाविद्यालय की वरिष्ठ प्राध्यापक डॉ. मधु श्रीवास्तव ने कार्यक्रम को बहु उपयोगी बताया। कार्यक्रम में डॉ. माया शेंदपुरे, डॉ. एमएल वर्मा, सुनीता बत्रा, सुधीर कुमार, मिलिंद शिंदेकर, देवेन्द्र गुंडे, डॉ. अभया जोगलेकर, डॉ. रमा सरोजिनी, डॉ. रागिनी पांडे, डॉ. भूपेंद्र सिंह, नीतू



हरमुख, विनीता साहू, किरण देवांगन और प्रिया देवांगन सहित काफी लोग मौजूद रहे।

एग्रीकल्चर यूनिवर्सिटी में दी जाएगी ट्रेनिंग

इंदिरा गांधी कृषि विश्वविद्यालय के कुलपति डॉ. पाटिल ने कहा कि करोड़ों रुपए की लागत से खरीदे जाने वाले उपकरण सही देखभाल

और रखरखाव न हो पाने के कारण खराब हो जाते हैं। उनका सही सदुपयोग नहीं हो पाता है। इससे प्रायोगिक कार्य प्रभावित होता है। इसलिए हमारा पहला कर्तव्य होना चाहिए कि हम इन उपकरणों का सही रखरखाव करें। उन्होंने कृषि विवि में उपकरणों में सुधार की जरूरत बताते हुए मुंबई से आई टीम को आमंत्रित किया।

मारव के स् पर र

रायपुर स्थापना जयस्तंभ आयोजन से सहयोग भारतीय जय दाद योगदान में लगभ किया। इ ने बढ- विशेष र रक्तदान नितिन रामकृष्ण बैंक हि शिविर शिविर र रक्त का इसे बना पड़ने पर लाभ मि रूप से रूप का स्वरूप का भु जाएगा। अग्रवाल दिया। अधीक्षक इस मौके हनुमान अग्रवाल चौधरी उ अध्यक्ष र









