Langmuir-Blodgett Citations

Year

Chemical Abstracts

Science Citation Index

Compiled by W. R. Kelly, NIST
SCENES CONNECTED WITH THE BLODGETT TRAGEDY IN SCHENECTADY, N.Y.
The Book of the
Class
1917
of 1917
A Garden is a Lovesome Thing

If Cedy hadn't caught scarlet fever and retired to the infirmary, taking Ruth with her, the Sophomore banquet wouldn't have been postponed and we should have lived to tell a different tale about April 24, 1914. As it was, instead of having our plans formulated by a "committee appointed by the chair," we had no plans and all things worked together for originality. Each member of our precocious class had a chance to react to her environment, and we responded nobly.

As the last frilly, fluffy Senior (and Junior) disappeared through the gym door at seven-thirty, bound for a peaceful and congenial evening together (an event in itself memorable enough), we leaped through the window of Taylor and took possession. Those dear familiar faces in there suggested the first crying need, and without more ado the aesthetically minded set to work to "cover up the dust," while the rest of us betook ourselves to investigate the intricacies of the upper regions. It had never occurred to us before that Taylor was an ideal place for hide-and-seek, but before we had finished with the watchman that night we had learned a great deal. Long after the decorators had gone he pursued us. We seduced him across the chapel and all around downstairs while the bell rope was being sawed off over the iron railing of the tower stairs; we vainly searched the lowest deeps for a monkey-wrench and hid behind the boiler at the sound of his long-

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suffering tread; and when he finally cornered Scat and me clinging to Savonarola and, peering round the corner, announced that he "had our names," we wondered why he had put himself to so much labor to convey to us that bit of information. Before ten o'clock our co-operative efforts triumphed. "No curfew rang that night at B. M. C.," for the rope, wound around Anne Davis under her jumper, left Taylor by the back window, and the Sophomores studied in the lib till ten-fifteen before they discovered anything wrong.

In the meantime many hands had made light work of the campus. Sammy Arthur hung decorously by the nape of his neck from the back porch of Taylor and swung his heels in friendly greeting at the frog on Merion porch; sermons in stone were applied with ink and shoe-blackening and an eye to the artistic; those pictures in Merion were clothed and in their right minds; we left the Seniors a little token waiting for them outside the gym to let them know we had been thinking of them; and then there was that lovesome spot—that little oasis—those pretty tooth-brushes all planted in a neat circle in front of Taylor with their warning, "Please don't pick the wild flowers."

The post-mortems began before breakfast. Liz appeared in the gray dawn in Con's
room, imploring her to get us up and make us go out and scrub, while Golly and Cecilia started Prickett's work in on his day of changing bath-brushes to Miss Hall. Trained Indian awash water over our persons and an uncomfortable rumor went about that six Freshmen were to be expelled (the precise number that had cut the hall rope). Wednesday morning the theater stood burst in chapel, while Sevarede, his countenance still flushed, flamed indignantly upon us from heights above the storm. His expensive face was a thing of beauty — but would that the powers that be could have seen it that way. By the time that his complexion and others were restored to their former pallor, "expensive" was no word for them.

And so our adventure ended—but not without one more incident. The next October, when we sacrificed Mrs. Grenell in our hurly to the meandering strains of "O Fresh, O Fresh," firmly attached to the back of her line, baby head was to be seen a sizable length of Taylor bell rope.
July 19, 1918

Miss Katherine B. Blodgett,

230 East 11th Street,

New York City

Dear Miss Blodgett:

Replying to yours of July 16th.

Can’t you come now? We have work you could do and it is part of our Government experimental work. Of course we should be glad to have you join us in the Fall, but gladder if you come soon. I think you would be worth at first about $125 a month. Is this a bad guess?

Yours very truly,

W. Richard

WRW C
Early morning camp, Brewton, Ala.
"Go to Arizona for the dry climate."
Blacked with TNT to make a road
Miss Blandgett:

Sunday I saw you, with a younger friend garbed, and equipped with skis mounting the Gloversville car. It shocked me more than you can imagine.

I had just come from church where Mr. Anthony, as usual, had fine sermon, and after the service talked four minutes to the men of the undertakings towards improving and adding to membership and spiritual life of our church. It spoiled all this. I haven't got over the effects of it yet.

The more I thought of it the more I was impelled to do something. If it had not been you recently organized a class an important class in the Sunday School, I would not have affected me so much.

Perhaps instead of going to skiing Saturday afternoon you devoting the time for study and felt justified to omit church and enjoy the afternoon as you did, and never thought about its direct effects as well as indirect effect upon others.

If God cannot depend upon his professed followers to defend His day, upon whom can we depend?

Is not this country better than any other country, and that is due to great extent, for the much better observance and respect of Lord's Day than in other countries, where Sunday wedding and elections are very common.
The Bible makes keeping of Sabbaths the mark of distinction between those who are God’s followers and those who are not. As long as the Ten Commandments stand, neither God nor man can sanction playing tennis, golf, skating, theatre, and like worldly amusements, as God asks only one day of seven for him, and that to keep it holy.

Dr. Stevenson has spoken from the pulpit about Sunday golf. I know some of the scholars of Sunday School have made it harder for their teachers because of their knowledge of few members of our church, who they knew were playing golf, on Sunday at the golf grounds.

You will furnish another case, and a more damaging case, even if I refrain saying anything than this letter.

We have often criticized and condemned Catholics for going to church and spending the rest of the day in doing everything that pleased them.

I wish you would give this matter prayerful and serious consideration and ask if God suddenly appeared at such times would you not stop and ask for pardon? But if you cannot deny yourself, for its far reaching effects, at least, you would give up teaching your class.

Hoping that you would take the former step.

I am,

A member of our church.
Motor Inventions Co.,
La Crosse
Wisconsin

Gentlemen:

I am enclosing your card which I have signed, requesting you to send me an Airburner on your special free trial offer. I shall be very glad to try this on my Ford and to keep it if it does all that you promise.

I judge from the name of your company that you deal in other motor accessories beside the Airburner. I should therefore like to draw your attention to a simple device which I have recently made for my Ford at a cost of fifty cents, and have used with such great satisfaction that I feel convinced it would be popular with other Ford owners.

Anyone who has driven a Ford for any length of time has experienced the disagreeable sensation of having his car stop on a steep hill for lack of the five or six gallons of gasoline necessary to supply the gravity feed on a bad pitch. A careful driver may never be caught in such a dilemma near his home town where he is familiar with the roads and knows when he is likely to encounter a steep grade, but on a long tour far from home where the roads are unfamiliar the gravity feed becomes a menace even to the man who is most painstaking about looking out for his gasoline supply. An unexpected detour may suddenly lead a man off the well-graveled road on which he has been traveling with gasoline enough in his tank for another hundred miles, and take him winding through hills on a narrow, rocky, country road far from houses and gasoline stations, and leave him stranded on a sharp pitch perhaps only twenty feet from the top with a half-full tank but a dry carburetor. Then it is poor consolation to him to reason that it isn't his fault for he had plenty of gasoline for the state road he expected to be traveling; and it is worse consolation to remember the advice to climb the hill by backing, for the chances are ten to one that this narrow, rocky road has a washed-out ditch on each side where the hill is steep, or perhaps a steep bank or a fence or trees growing close, and it is impossible to turn around hill he has backed a long distance. So he must back down a steep, perhaps long and winding hill, which is extremely disagreeable and often dangerous. And if this is sometimes the predicament of the most cautious driver, what about the needless thousands who often have barely a pint of gasoline in their tanks, much less five or six gallons?

Shortly after I made my fifty-cent device which is so small and compact that I keep it always under the driver's seat of my sedan, I set out on a tour through Vermont with a tank brimful of gasoline. After only fifty miles my route led up a long steep hill where the engine stopped a short distance from the top. I backed a few feet to a more level point where the carburetor could fill, cranked the engine, started up the hill, and again the Ford stopped at the same point. I then remained at this
steep place, adjusted my device in half a minute, cranked the engine and finished climbing the hill without the slightest difficulty. On another recent occasion I was compelled to pass a large truck which was stalled in the middle of a very narrow road, and my outside wheels became caught in the mud of the ditch, stalling the engine and leaving the car tilted at a perilous angle to the left. Before I could crank the engine the gasoline had flowed out of the carburetor from its higher position on the right side of the car, but again with my device I was able to remedy matters and soon had the Ford climbing out of the ditch.

I know from the stories which other Ford owners tell me of their experiences that a compact, inexpensive device like mine which will perform such valuable service and at the same time is so simple in operation that it cannot fail to work, would meet a real need in the Ford world. I am busily engaged in my profession so that I am not free to enter upon the manufacture and marketing of this device myself. Otherwise I know of nothing that would give me greater pleasure than to put before the public something about which I am so enthusiastic myself.

If you are interested, will you kindly let me know?

Very truly yours,
UNIVERSITY OF CAMBRIDGE

DOCTOR OF PHILOSOPHY

The Title of the Degree of DOCTOR of PHILOSOPHY is conferred upon

Katharine Burr Blodgett

of Neunham College

by this Diploma.

Given at Cambridge the eleventh day of August 1924.

Vice-Chancellor

Registrar
A METHOD OF MEASURING THE MEAN FREE PATH OF ELECTRONS IN IONIZED MERCURY VAPOUR

BY

KATHARINE B. BLODGETT, PH.D.,
GENERAL ELECTRIC CO., SCHENECTADY, NEW YORK.
Explaination of Spectra of Metals of Group II. 193

constant. From the mean value of $p\lambda$ we obtain a value for $\lambda$ of 18.5 cm. at 0.001 mm. pressure. The estimated correction of 3 per cent. for zigzag paths would raise this $\lambda$ to 19.1 cm.

The writer wishes to express her thanks to Sir Ernest Rutherford for his interest in this work, and to Mr. Stead, who set her to investigate the properties of long glows and gave her constantly the benefit of his experience. She is also indebted to Dr. Langmuir for important criticisms and suggestions in the course of writing this paper.

XV. On the Explanation of Spectra of Metals of Group II. —Part II. By P. K. Kichlu and M. Saha, D.Sc., F.R.S., University of Allahabad, Allahabad (India)*.

In a previous paper one of us† has discussed the origin of the higher Rydberg sequence terms in the normal spectra of elements of group II. It is well known that
The writer would like to state at this time that Mr. Stead is the most consummate fool she ever met. She would also like to mention that Sir Ernest Rutherford neglects his students with more nonchalance than he ought to be allowed to get away with. She would therefore like to take this occasion to express her thanks to Dr. Irving Langmuir, since the training that she received from him was all that made these experiments possible.

OR

The writer wishes to express her thanks to Sir Ernest Rutherford for his interest in this work, and to Mr. Stead for giving her constantly the benefit of his experience in this field. She is also indebted to Dr. Langmuir for criticism and advice with regard to the matter of working up the data.
Dr. Katherine B. Blodgett, scientist, is shown at work in the General Electric laboratories at Schenectady, N. Y., shortly before she announced her discovery of a coating that makes glass invisible, glareless, and 99 per cent efficient in transmission of light that hits it.
Blodgett’s Color Gauge

“Anyone who wishes to measure the thickness of a film which is only a few millionths of an inch thick can compare the color of his film with the series of colors in the gauge. The step on the gauge that matches his film in color will give him a measure of the thickness.”

Katharine B. Blodgett