

Bond Award Winner Celebrates Acceptance in Verse

The Bond Award Gold Metal originated within the AOCS for the purpose of encouraging superior presentation of papers at technical meetings. The winner of this year's award, D. T. Warner, has doubly demonstrated his qualifications for receiving this award; his acceptance address, given in verse, was also a superior presentation, and is indicative of even wider dimensions to his talents.

JAACS is pleased and honored to reprint his verse here in its entirety "dedicated to the anonymous donor of this prize."

My Friends, it wouldn't do to simply say,
"I'm grateful for the Bond Award! Good Day!",
So with your leave I'll reminisce a bit
About some key events preceding it.

My first exposure to the fats and oils—
Their double bonds and hydrophobic coils—
Came early in my stay at General Mills,
A company known for items it distills
From oil of tall and other people's "foots",
Selected steroids from assorted roots,
And Kix and Wheaties, naming only two
Of breakfast cereals all prepared for you,
Or dienoic acids dimerized
By thermal process—Products visualized
To fill the coffers of said General Mills
With profits, which at Upjohn come from pills.

In consort there with Dr. D. H. Wheeler,
A noted scientific "wheeler-dealer",
And judged by standards of the best repute,
A fine and gracious gentlemen to boot,
Who understands the foibles and the foils
Of edible and non-edible oils,
And all the transformations of the fats
Or antioxidants to add to vats
So that the flavor may be well preserved
And no untoward odor be observed.
Together we set out with one accord
To earn by dint of toil our bread and board
In synthesizing coatings for the trade,
Based on the polyamides that are made
From dimer acid and some diamine,
Especially those with carbons twain between
The basic nitrogens, by which I mean
The simplest—diaminoethylene.

One major source of trouble in the quest
For something better than the then-known best
Lay in the "dimer-trimer" ratio,
A value fixed by methods crude and slow
In which distilling played a crucial part—
Said "dimer", in the parlance of the art,
The distillate that dribbled from the pot,
While "trimer" was the refuse that did not.
Once having fixed the ratio "D to T"
Some monomer was still the vital key

To resins suited for the coating trade;
And many were the "monkeys" that we made
Before the system yielded to the art
And much concerted effort on our part.
But now the final process was "on stream",
And final "spees" excelled our fondest dream.
Then Fate stepped in—An early morning fire
Destroyed the plant, tossed solvent barrels higher
Than chimney tops, to instantly undo
A lot of hopes and lots of labor too.

It took us many years to just restore
The lost advantage of the "first-to-score",
While other products gorged the market place
As competition in the resin race.
Meanwhile I had found myself involved
With other research, in which we resolved
The problem of the tryptophan supply
With methods which enabled one to buy
This item at a price one could afford,
But major stocks and bonds across the board
Were unaffected by this gladsome news,
And we were forced yet once again to choose
Our faithful friends, the lowly fats and oils
As likely prospects for our daily toils.

Derivatives now seemed a favored place
Of entry in the helter-skelter race
For profits in the postwar cavalcade
Of new and better products to be made
From intermediates now available.
"Exclusives" were not unassailable,
And every effort tirelessly was bent
To make a sizeable incisive dent
In the prevailing outlets that were then
Parlaying every fatty nitrogen,
Including nitriles, amides, and amines,
Companion pieces like "Arquads" and "Tweens".

I played a role in this development
Which to the dream supplied embodiment,
But ere derivatives from G.M.I.
Were ready, and available to try,
I sadly, yet with mixed emotions too,
Had left the "General", came to Kalamazoo—
A city that can proudly make the boast
Its name was spelled in song from coast to coast
(One gentleman from England was aware
That "some guy had a gal-friend over there".)
And "K--A--L--A--M--A--Z--O--O"
On stoves was once a household word, but though
The slogan "Kalamazoo Direct to You"
Was rhythmical (since "zoo" doth rhyme with "You"),
It never could compete as status shaper
With "Celery City—Home of Pills and Paper"
So when you think of Kalamazoo, anon
I trust you'll link it also with Upjohn,
And won't begrudge me just a little bit
Of a commercial, namely and to wit—
"Industrially as fine a dwelling place
As doth befit the scientific race".

For several seasons I was busy in
A search for substitutes for heparin,
Acquiring rich experience in the field
Of carbohydrates, stressing both the yield
And specificity of sulfonation
With variations in the conformation
Of sugar moieties, and ever still—
Still finding only heparin filled the bill.

The "anorexogenics" were the next
In order for the sequence of our text,
But when the opportunity arose
For peptide synthesis, I gladly chose
To cast my lot with this intriguing task.
"But how", you certainly may fairly ask,
"Did this assignment ever lead you on
To study protein conformation?"
My answer—It was curiosity
To see perchance if reactivity
Might lie in some arrangement of the chain
Which only this arrangement could explain—
Some feature of the gross geometry
Permitting general uniformity
Of structure. So we promptly undertook

Construction of some models, had a look
At cyclic peptides of assorted size,

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• *Bond Award* . . .

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And from this study came to realize
One feature—this hexagonal array
With its congruent water overlay,
So that the oxygens in register
Between the peptide-water might confer
Stability. I won't explain it all—
It's difficult with pictures, you'll recall—
To tell the truth, it's infinitely worse
To put it quite succinctly all in verse.

Things were progressing very well indeed
With due dispatch, if not breath-taking speed,
When Dr. Eugene Roberts stopped one day.
Ostensibly he came to simply pay
A visit to a friend, and chat a while
Of molecules and men; and really I'll
Be frank and say I didn't expect at all
Within the week that he would ever call
And calmly ask me, almost as by whim,
To spend a year's sabbatical with him.

With kind permission from our management,
I soon was "hell-bound, California-bent",—
Or is it "hell-bent, California-bound"?
(It didn't rhyme this other way around
Now here it does, as you can plainly see!
Ah! That's the bane and bliss of poetry.)
We'd settled for a half a year instead,
So I arrived, in sooth, heels over head
In bags and bags of models of all sorts—
"Molecular", that is—so no retorts
On other sorts of "models", or on "bags"—
Of other sorts, that is—I've heard those gags!

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And having been provided with a bench,
A lamp, a table, and a monkey wrench
For disassembling balky model joints
Or emphasizing some contested points
Of argument, should the occasion rise,
I set about attempting to devise
By means of principles I'd used at home
A model suitable for cytochrome,
(Especially the cytochrome called "C",
Specifically, horse-heart variety),
That Dr. Robert's group had interests in
Which therefore to my interest was akin.

The coil of hexagonal array
Was steadily expanding day by day,
And as it grew to fill the table top
When people passed, they'd hesitate, then stop
In curiosity, as if to say,
"What folks won't do to earn their take-home pay!"
Then I met George! "George who?", you'll ask, of course.
George Rouser! That so effervescent source
Of boundless energy and endless zest,
Who, finding something new, will never rest
By night or day, until some clue he wrings
Of how it fits into the "Scheme of Things".
He, from our "Great Society's" array
—(The AOCs, not the L.B.J.)—

Of talent, forges *in absentia*
Those "multiphasic" called "Symposia"—
The "interdiscipline-ish" sort of fling,
With bits of much, not much of anything,
Which George arranges in the spring or fall.
The name ain't suited to the thing at all!
'Tis rumored now among our sots and souses
That these affairs may well be renamed "rousers".
For lo, he always rousing me or you
To do some thing we hadn't wanted to
(Which when we've done it turns out quite all right—
We credit this to his unique "foresight").
So in our conversations he disclosed
A program he was planning, and proposed
That I should give a comprehensive tome
On models, and the patterned honeycomb-like
Structure for the polypeptide chain
Which I was laboring with. I here refrain
From noting all the fervid argument
With which he sought to gain my prompt consent,
Enlisting classic work of Vandenheuvel
At the atomic mechanistic level,
Portraying all the many layered strands
Of lipids, and the intervening bands
Of water, monofilament protein layers
In harmony, as life's symphonic players.
The charms of Nicholas Nicolaidis.
He brought to bear, and supplemented these
With culinary coaxing—(this in jest)—
Though I was always treated to the best
When we dined out—at his expense, that is—
There was no question—Yes! The bill was his!
(I s'pose I should repay him here today—
I'll take him out to lunch at some cafe!)

And Gene Kritchevsky did the cause no harm.
He never really tried to twist my arm;
But poising in his hand a great cigar,
He told how George was quite the avatar
Of what a pure-bred scientist should be,
And how he thought for sure if I were he
I'd clearly see the proper path to choose—
Besides, there wasn't anything to lose.

And so to that I finally agreed—
I really felt like a raccoon that's treed
Who's told that everything will be just fine
If he'll come down and sign this dotted line.
(The simile is strained a bit, of course,
Though you've all heard about the "talking horse"
So why not a raccoon that can converse
And read—or write, which could be even worse

Considering all the "written word" that now
We're asked to scan and cogitate somehow,
Then add the future prospect, if you please
Of reading fluently in Raccoonese.)

But as I said, I did agree to come
And give a talk at his "Symposium".
So in the spring by plane or train or bus
We congregated in Los Angeles,
Converging on the Hotel Statler-Hilton
From Maine or Washington, from towns like Wilton
And Fullerton or hamlets in between.
And some had come to give, and some to glean—
A motley stew of gifts and inclinations
And talents tuned to many aspirations.
Yet one convening touch to all our toils—
A lively interest in the fats and oils.
And at the end of three inspiring days,
We parted to our homes by devious ways,
The "Great Symposium" a thing now past
But lots of pleasant thoughts to make it last.
I hope my talk accomplished what it should—
George said it had, so I felt kinda good.

But the most pleasant memory of them all
No doubt will be the sequel here this fall,
When by your gracious generosity
You have conferred the Bond Award on me.
Here to be honored with this handsome prize
Was a most humbling, undeserved surprise.

(As one quite new to the Society
This medal was a thing unknown to me.)

And so my thanks to all who were involved—
In formal parlance, "Be it here resolved—"

To Tom Findley and his "Henchmen Three"
Who chose me, a reluctant awardee.

And to the donor of the Bond Award,
Who though anonymous, and in accord
With his own wishes, so prefers to stay;
But if, by chance, he's here with us today,
Then, Sir (or Madame), as the case may be,
In the behalf of the Society
Our grateful thanks, but mine especially.

And to the man who got me up this tree—
To dear old George—though last, not thereby least—
I may have mixed the dough—He had the yeast.

DONALD T. WARNER, PH.D.
The Upjohn Company
Kalamazoo, Michigan

New ASQC Short Course

"Multiple Regression and the Analysis of Plant Data" is the title of a short course to be conducted in Chicago on Feb. 10-11, 1967. This is a relatively new course in the curriculum of excellent short courses offered by the Chemical Division of the ASQC.

Beginning with first principles, the course deals with the fitting of straight lines in one variable, shows how to extend to the two-variable case, and subsequently to the many-variable case. It is shown how to handle the problems of estimating and testing regression coefficients using matrix algebra. This is done in such a way that no previous knowledge of matrices is required.

The instructors are Harry Smith of the University of North Carolina and Norman Draper of the University of Wisconsin. These men have prepared this course and have had considerable experience in the usage of regression techniques.

For further information contact R. J. Hopp, Research & Development Center, Swift & Company, Exchange and Packers Avenues, Chicago, Illinois, 60609.

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AOCS Men at India Meeting

"Problems and Prospects of the Oil, Soap, and Detergent Industries," will be the theme of the 22nd Annual Convention of the Oil Technologists' Association of India, tentatively set in Bombay for Jan. 14-15, 1967.

Focus of the conference will be a symposium on cottonseed utilization. At present India is forced to import large quantities of soybean, sunflower, coconut, palm and tallow oil for industrial and consumer use. She is now seeking ways of better using her own readily available raw materials, among them cottonseed. AOCS members K. S. Murti (1947) and V. Krishnamoorthi (1962) will take part in the symposium. R. P. Hutchins (1942) of the French Oil Mill Machinery Co. and a company representative from V. D. Anderson have also been invited to speak.

The convention will also consider the following areas: 1) soaps and detergents; 2) refining of oils by continuous process; 3) current research in oils, fats, soaps, detergents; 4) packaging; 5) import substitution and export promotion of oil, soap, and detergent industries. J. S. Badami (1947) and G. C. Cavanagh (1946), and company representatives from Sharples and De Laval have received invitations.

Co-sponsors of the conference are the Soybean Council of America, the Vanaspati Manufacturers' Association of India and other scientific associations. Helping to organize the convention were AOCS members V. M. Pai (1965), S. D. Kashyap (1946), and T. V. Subba Rao (1948).



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