MELPAR, INC.

An American-Standard Company

Volume 14, Number 2

March 1969

NEW PRODUCTS REPORT:

Melpar Introduces A New Group of Bio-Medical Products For Use In Laboratory Research.

This marks the entry of your company into a new and highly challenging field.

After more than three years of extensive research and testing, the Scientists in our Life Sciences Laboratories have perfected a new group of products for the immunochemical field. This has led to the establishment of the Biological Products Laboratory which now will be responsible for continued research and development.

The products, which are intended for use by researchers and pathologists working in laboratories throughout the world consist of twenty-five reagents (antiserum and proteins) and four unique testing plates. All are used to test for and identify blood abnormalities such as multiple myeloma (a form

With Melpar's antiserums, detection

and identification of these blood abnormalities can be more quickly and more positively confirmed than ever

There is a great need for these products in the continuing war on the diseases which afflict mankind. And Melpar's antisera are a major step forward in quality and effectivenessso much so that we have dubbed them the "New Generation" of reagents.

Along with these antiserums, Melpar scientists have perfected four new 24determination Quantitative Immunodiffusion Plates. This dish-like plate (see fig. 2.) is filled with agar, a substance which closely resembles jello in appearance and texture. This agar, in turn, is impregnated with a Melpar

antiserum. Holes are then punched into the agar. The user now has a test plate with 24 holes (or wells) on which he can run 24 tests simultaneously by simply putting various blood samples into the wells.

The antiserum and plates, which are currently available in quantity can be shipped to customers within 24 hours of receipt of an order.

Included in the present line are some of the most difficult to obtain anti-serums such as Anti-IgD, anti-Bence-Jones Kappa, and anti-Bence-Jones Lambda.

This is the first time the anti-IgD antiserum is being produced on a quantity basis for off-the-shelf delivery—a tribute to the determination and resourcefulness of our Biological Products Laboratory staff.

The entire group of products is prepared here, at Falls Church, from basic antiserums produced in goats and Continued on page 3)

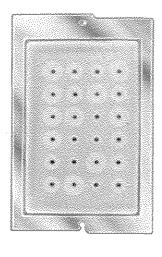
Just one of the new Melpar reagents, Anti-IgG. Others now available include Anti-IgA, anti-IgM, anti-IgD, Anti-Bence-Jones Kappa, Anti-Bence-Jones Lambda, Polyvalent, and Anti-Whole Human Serum, plus 17 more. FIG. 1



GUARANTEE

Melpar Biological Products Laboratory guar-antees that its reagents and related products are of the highest quality commercially at-tainable.

tainable. Melpar further guarantees that minimum polency ranges are accurate. If for any reason you are not fully satisfied with a Melpar product we will replace it at no charge, or promptly relund your money. &mmmmmmm &



Melpar's new 24determination test plate, the only one of its kind now available. FIG 2

The Winners!

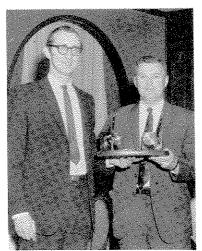
'68 MELPAR MEN OF THE YEAR— CONNELLY, GUINN, ROGUSKY AND WHELCHEL



SECOND TIME AROUND . . . Repeat winner, '67 and '68, Inventor of the Year, Ed Connelly gets surprise award from House Counsel Austin Roe.



CO-WINNERS... Authors of the Year receive their awards for the best publication. Left to right, President Chambers, David F. Guinn, John E. Whelchel, Jr., and Dr. R. Burton Power, committee their many committee.



VIP MAN OF THE YEAR . . . Fred L. Rogusky (left) accepts his award from Vice President T. D. Kelly.

Melpar's Annual Awards Dinner was held at the Springfield Country Club on February 25th.

Edward M. Connelly was winner of the Invention of the Year for his "Trainable Computer Module."

Mr. Connelly was selected by the committee headed by Austin G. Roe with A. F. Lopez, J. R. Sayers, H. Hurvitz, (outside patent counsel) and Barbara H. Feehan as committee members.

Other candidates nominated for the award included Henry Hahn, Paul J. Lare and Amarnath P. Divecha for "Fiber-Reinforced Frictional Materials", R. H. Hronik, *B. D. Smith and *James Wallen for "Apparatus for High-Speed Measurement of Track Geometry", Donald E. Lewis and Clarence R. Shenton for "Integral Reed Tuning Fork", and Thomas P. Meloy for "Material Identification Coding Methods and Systems".

*ex-employees

John E. Whelchel, Jr. and David F. Guinn were joint winners for the publication, "The Fast Fourier-Hadamard Transform and Its Use in Signal Representation and Classification".

The Publication Committee was R. Burton Power, Chairman, A. F. Lopez and J. E. Riley.

Also nominated for this award were Henry Hahn, Amarnath P. Divecha, Paul J. Lare and Robert A. Hermann for their publication, "Some Recent Advances in Preparation of Whisker Reinforced Metal Composites", Bradley R. Koch for "High-Speed Research Train Instrumentation", Thomas P. Meloy for "Fine Grinding—Size Distribution, Particle Characterization, and Mechanical Methods", William J. Richter and Raymond L. Hawkins for "Multi-Mode Propagation Communication System".

Fred L. Rogusky received the award for the Value Improvement of the Year for his suggestion, "Simplification of Transmittal Letters for Proposals".

The VIP winner was selected by a committee headed by T. D. Kelly, and included A. M. Ross and W. F. Vivori.

Other candidates for this award were Julia A. Coffin for her suggestion, "Simplified Procedure for Distribution of Supervisor's Report", Lacy L. Farmer and Arthur E. Hilker, Jr. for "Improved Method for Electrical Inspection of Variable Resistors", Frank L. Hickisch for "Standardization of Hardware Through Conversion of Non-standard to Standard Fasteners", and Stephen E. Bush for "Reduction in Costs for Replacement of Filtering System for Chemical Hoods".

THE PATENT PICTURE

Three patents were issued by the United States Patent Office to Melpar in January 1969.

"Radiation Cooled Cryostat" relates generally to thermostatic cooling techniques but more particularly to cryostats which function in space by radiative cooling alone to provide a low temperature environment suitable for the operation of various satellitemounted electromagnetic radiation detection devices.

"Speech Synthesizer Having Q Multiplier" relates to a new improved high Q bandpass filter having variable center frequency and fixed bandwidth with variations of center frequency so that it is particularly adapted for use in vocal tract simulation of speech synthesizers.

"Radiant Energy Source" provides a source of coherent radiation of a wavelength which may be varied continuously throughout a predetermined region of the spectrum, and more particularly, throughout portions of the infrared region for which sources of radiation have previously been unavailable.

New Products (Continued from Page 1) sheep which are housed on the animal farm in Maryland. As is the case in the production of any antiserum, these animals are injected with minute quantities of purified human blood components. The animals, in turn, build up antibodies to these components. The antibodies are then extracted from the animals' blood and put through five exacting refining steps before they are declared ready for shipment to customers.

For those of you who are wondering about the fate of the sheep and goats, rest easy. They live the life of luxury on the farm. Because of their special role, they are the most pampered animals you'll find anywhere.

A word about reagents

For those of us who are not familiar with the biomedical field. an antiserum is a reagent which reacts with a particular substance. Put another way, when a laboratory researcher or pathologist wishes to use a particular antiserum to check the serum from an individual, he tests a small amount of the serum with the appropriate antiserum. In a short time a reaction occurs which indicates that a certain blood disease may be present. The antiserum used reacts only with a specific element in the blood. Hence the term given it is "reagent."

To be truly effective, an antiserum must have potency (strength) and specificity (purity). Melpar antisera are superior in potency and specificity to anything currently available. That is why we refer to them as the "New Generation" of reagents.

Meet the people who made these new Bio-Medical Products possible . . .

The staff of our Biological Products Laboratory are all highly skilled professionals who have spent the better part of three years developing the "New Generation" of reagents and 24-determination plates.

Headed by Dr. Fred Hymes, the staff also includes Dr. Anne Jackson, Miss Marlene Barger, Mr. James Steele, Mr. Keith Richardson, Mrs. Evelyn Allen, and Mrs. Sue Kacena.

The animal farm, located in Owings Mills, Md. is ably managed by Mr. Tom Morris.

Company Moves Into Billion Dollar Class

Earnings Jump 35% on Sales Rise of 8%

American-Standard sales in 1968 totaled \$1,075,235,000—first time in the company's history that it topped the billion dollar mark, and 8 per cent higher than in 1967.

Earnings per common share in 1968 amounted to \$1.77 (before extraordinary income), an increase of 35% over 1967 earnings of \$1.31 per share.

The secret of discipline is motivation. When a man is sufficiently motivated, discipline will take care of itself.

New Products Committee

The formation of a New Products Committee has been announced by J. P. Chambers, Melpar's President. The committee consists of Corporate Officers with a working subcommittee to evaluate potential new products and make recommendations to the New Products Committee, The subcommittee members are:

D. E. Lewis

S. L. Dance

J. R. Sayers

A. F. Lopez R. C. Borden

You are encouraged to submit to the committee any potential new products ideas or suggestions that you may have through the use of a New Product Suggestion Form, GA-164 and GA-164.1, available in Stationery

Suggestion Award Winners

Stores.



Mr. J. P. Chambers awards U.S. Savings Bonds to employees who have submitted suggestions which were accepted and implemented and resulted in a \$500.00 or more annualized savings. From left to right: S. Bush, (\$75.00 Bond)

A. E. Hilker (\$50.00 Bond), G. W. Pierce (\$25.00 Bond), Mary Hanson (\$25.00 Bond), Mr. Chambers, Judy Coffin (\$25.00 Bond), L. Barrick (\$25.00 Bond), Ł. Farmer \$50.00 Bond),

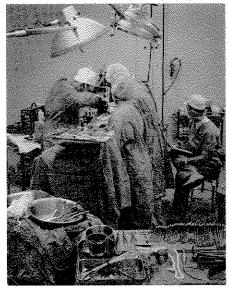
The Rockville Bio-Engineering Laboratory

The Rockville Section of the Bioengineering Laboratory houses a complete surgical facility that is presently engaged in the evaluation of the physiological effects of artificial heart devices in animals for the Artificial Heart Branch of the National Heart Institute of the NIH.

The laboratory is equipped for a wide range of cardiovascular surgical procedures and includes a heart lung bypass machine which will enable total heart replacements, both natural and artificial, to be performed in the future.

Complete physiological studies on the subject animals include blood pressure and flow measurements in the heart and blood vessels. This information is available for immediate display and is fed to a central data collecting point where it is stored on tape for evaluation and future reference. Blood chemistry and morphology examinations are carried out in a clinical laboratory comparable to those in most modern hospitals.

The laboratory is under the management of **David M. Speaker**.

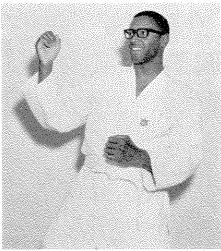


An actual operation in progress at the Rockville Section of the Bioengineering Laboratory.

Published by MELPAR, Inc.

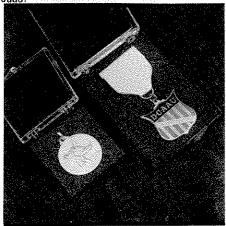
An American-Standard Company

7700 Arlington Blvd Falls Church, Va. Editor. Jane K. Smith, Ext. 2706 Photographers R. K. Sakamoto H. O. Glittenberg



MEET THE CHAMPION . . . Melpar's John L. Gilliam pictured here wearing his judo Gi (coat), is the District of Columbia Amateur Athletic Union Association's Judo champion. He defeated 8 contestants in February to win the championship. John has been studying Judo for seven months, and although it is a rough sport, he heartily recommends it. The only casualty in the championship contest was to one of his opponents who suffered a broken leg in a poorly executed fall.

On March 8th, John was second place winner in a contest with 12 other contestants in Norfolk, Va. One of the contestants suffered a broken collarbone in this contest. Anyone for Judo?



Championship medals. Left, second place medal won in the Norfolk contest, right, the championship medal of the D.C. Amateur Athletic Union.

GOING UP!

January and February brought promotions and title changes to the following employees:

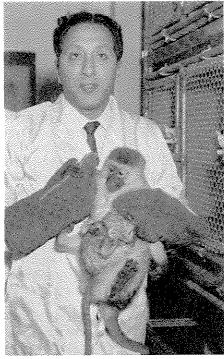
W. M. Poe rose to Principal Engineer, R. R. Cooke to Programmer, Virginia MacMinn to Senior Administrative Assistant, F. L. Hickisch and L. N. Morse to Senior OA Assistants.

C. S. Lawson and R. G. Haggerty moved up to Senior Test Engineers, M. R. Scudder to Senior Electrical Engineer and Willie N. Dingus advanced to Senior Security Assistant. Congratulations to all!

Know Your Group Insurance

- Q. Though I am married and have minor children, I'd like to name my aunt as beneficiary to receive my group life insurance in the event of my death. Is this permissible?
- A. Yes. You may name any person or organization as your beneficiary. However, your aunt, as beneficiary, will not be entitled to any health insurance benefits. Such benefits are limited to "dependents" as defined on page 5 of your insurance booklet.
- Q. A December merit increase advanced me to a higher earnings class. Why was my contribution not increased until February.
- A. Changes in contributions are made only on February 1 next following a change in one's earnings class. You will find this explained on page 6 of the booklet.

If you have a question regarding hospitalization or insurance, submit it to your editor for discussion in future issues.



MONKEY COLONY NURSERY INCREASES...
The Life Sciences Laboratory at Shirley Research now has four new baby African Green monkeys born and bred in captivity at Melpar. There are three more pregnant females in the lab expected to deliver this summer. Four males, each with a harem of four or five females are housed in the ultra modern facilities with running water and sterile air. Observation continues to collect data to be used in increasing our nursery. Senior Research Assistant Alejandro Arce holds the newest African Green baby monkey and its mother.

DAVID E. HARRIS HEADS MICROWAVE TECHNIQUES



The formation of a new laboratory has been announced by Chief Engineer T. F. Curry. The Microwave Techniques Laboratory, under the managership of David E. Harris will

DAVID E. HARRIS exploit the application of new technology in areas such as proximity warning, infrared

such as proximity warning, infrared reconnaissance, microwave component development, and related devices.

Mr. Harris joined Melpar in July 1968 as an Engineering Associate. Prior to that, he was with HRB Singer, Inc. for a number of years where he served as Manager Technical Planning, Director of Infrared Systems Laboratory, Program Manager and Staff Engineer.

Mr. Harris received his BSEE and MSEE from Carnegie Institute of Technology and served in the U.S. Navy during World War II.

ON THE DAIS ...

On February 11th, Melpar's Explorer Scouts heard Dr. John Verna explain the problems encountered and techniques used in virus research.

Mr. Don Stuart explained the operation of Melpar's electron microscope and demonstrated its ability to magnify viruses so they could be seen by the human eye. Scouts from Woodson High School under the leadership of Mr. Johnny Dicks were guests for the lecture and laboratory tour.

Mr. Al Lopez was the speaker for the March 11th Explorer's meeting. He spoke on Parapsychology, the phenomena of ESP, levitation, poltergeists, (objects in or around the house which appear to move with no physical reason) and dowsing, (location of water or minerals by means of forked twigs or rods).

Senior Metallurgist Amarnath Divecha addressed the SAMPE (Society of Aerospace Material and Process Engineers) Virginia Chapter meeting on February 5th at the Charter House. His subject was "Whisker Reinforced Metal Matrix Composites".

'68 COST REDUCTIONS EXCEED GOALS

Final savings have been computed and we are pleased to announce that Melpar has exceeded the 1968 Cost Reduction Goal of \$732,880 by more than 1.6%. Personnel and Material shared group honors. Personnel leading in Suggestions with \$24,728, and

Reports	
Of Savings	Suggestions
\$84,813	\$10,160
56,770	1,556
2,851	4,759
58,208	24,728
33,644	16,702
66,759	10,141
95,590	7,766
165,608	***
14,696	1,346
5,000	
75,122	3,307
\$664,061	\$80,465
	984,813 56,770 2,851 58,208 33,644 66,759 95,590 165,608 14,696 5,000

For 1969, Representatives for each of the major Organizations, with their Organizational Head, have established new cost reduction goals. These goals have been consolidated to establish a total corporate goal of \$700,000. The individual goals determined on a per capita basis are as follows:

Organization	1969 Goal
Engineering	\$181,280
Manufacturing	83,000
Accounting	17,820
Marketing	15,510
Personnel	12,430
R & QA	17,875
Research	112,545
Material	50,000
Procurement Savings Program	150,000
Plant Engineering	27,555
Special Products	6,985
Management Information Services	25,000
Total Corporate Goal	\$700,000

IN PRINT ...

The January-February issue of PER-SONNEL ADMINISTRATION contains an article written by T. L. Wood, Personnel Director, and C. C. Haley, Employment Manager, entitled "Hiring a Professional".

The article relates the importance of reducing costs of recruiting employees by identifying the costs, then controlling them.

Material in Reports of Savings with \$95,590. Total group savings honors went to Material with \$103,356 and Engineering with \$99,973.

Total results and contributions from each of the major organizations are as follows:

Total	1968 Goals	\$ Excess Over Goal
\$99,973	\$67,000	\$32.000
58,326	60,000	10000
7,610	36,500	
82,936	70,880	13,000
50,346	55,000	
76,900	109,000	****
103,356	74,500	29,000
165,608	150,000	15,600
16,042	30,000	
5,000	10,000	
78,429	70,000	8,400
\$744,526	\$732,800	\$98,000

Things Are On The Up And Up...

Figures released in January by The President's Council of Economic Advisers for The Joint Committee of the U.S. Congress show the following results for the period 1958 through 1968.

Total gross national product (total value of all the goods and services sold) increased during the ten-year period from 447.3 billions of dollars to 887.8 billions, an improvement of 98%.

Compensation paid to employees during the same time span, not including employer contributions to social insurance, increased by 106%. (257.8 to 530.7 billions of dollars).

Corporate profits after taxes increased by 91.4% during the period 1960–1968. Figures prior to 1960 were not published.

Corporate profits after taxes represented 5.7% of gross national product in 1968. In 1960 profits after taxes represented 5.3% of the gross national product.

During the 10-year span 1958-1968 consumer prices have moved from an index of 100 to 123.4 which represents a 23.4% increase or an average of 2.3% per year.

While all the above were happening the U.S. civilian labor force, not including the armed forces, rose from 69,305,000 in 1964 to 76,700,000 in 1968. Earlier figures were not available. The unemployment rate of 3.3% of the civilian labor force was the lowest rate recorded in more than 15 years.

January-February Pin Luncheon Honors Twenty-One

FIFTEEN YEARS



R. T. Benson



M. R. Finnell



E. L. Daacke



D. R. Gibbs



V. MacMinn



R. E. Miller



J. D. McLain



C. R. Parker



P. R. Potts



C. A. Tomasino

TEN YEARS



E. M. Beauch



E. R. Buchanan



F. Euteneuer



L. Farmer



L. Ferrante



C. C. Fritsche



G. Machen



J. F. Shenk



L. Snapp



J. Trops



C. F. Wood

Service pins were awarded to twentyone employees at the Pin Luncheon, held in the cafeteria on February 27th.

Ten employees observed their 15th anniversaries with the company, and eleven passed their 10th year.

Recipients of the service pins, presented to them by their department managers are pictured here.

The company has awarded through February 1969 the following total number of service pins:

> 10 year 718 15 year 132 20 year 14

PENSIONER NEWS

Guard Leroy Edwards retired in January 1963. He writes that he has enjoyed his retirement very much. He has traveled a lot, making trips to the west coast where he stayed for several months each time.

At home, in Fairfax, he spends his leisure in his woodshop where he makes Christmas presents for his grandchildren and furniture pieces for the family. He asks to be remembered to his "old buddies".

Looking At Melpar History

Thumbing through old issues of the Melpar-a-graph can be a hazardous undertaking for one susceptible to nostalgic fever but your editor took a chance and came up with the following items.

Volume 1, Number 1 was published in December 1955. That means your news sheet should have celebrated its 13th birthday last Christmas.

The first accredited courses offered at Melpar were in January 1956 from GWU and The University of Virginia. There was no tuition reimbursement program at that time.

The 50° or eimbursement program was initiated in September 1956 and this really opened the doors of education at Melpar.

131 employees enrolled for in-plant studies in October '56. The cost for one semester hour was \$13.00. One year later in October '57 there were 195 employees enrolled in-plant with another 282 taking outside courses. The cost in reimbursements in 1957 was \$10,286.

Education under tuition reimbursement reached a high point in June '59 when 529 employees received \$16,461 in reimbursements for the previous 12 months.

Total tuition reimbursements since September 1956 topped \$100,000 in March 1963 and by then we had assisted three employees to win their Masters Degrees in Engineering.

During 1968 268 courses were approved and 242 were completed for reimbursements of \$26,749 compared with \$20,817 in 1967.

Today the Tuition Reimbursement Program allows 100% reimbursement for doctoral program courses and for those over half finished with their Masters. 75% repayments are made for other Masters and those employees over 50% along on their undergraduate degrees.

In future issues we will recap other activities from the old issues of the Melpar-a-graph. If you have a subject you would like to refresh your memory about, please call your editor.