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Preface to the Internet edition by Rod Boswell

Charles Legendy, one of the real pioneers in the helicon game, has volunteered to put my thesis on the web as an historical reference. It was finished and handed in 1970 but because of examiner's problems was not accepted until 1974. There are still a number of typos which will, hopefully, get corrected in the near future.

I did not really get back to the work I did at Flinders during the late '60s until I was trying to get tenure in the mid '80s and needed publications. I then dug out the old thesis and rapidly published 3 papers containing thesis and new material. These papers have formed the basis of most of that which followed on the strangely high density of the discharge and the role of electron inertia in the radial structure, now referred to (incorrectly) as TG modes. To young researchers I echo some lines from Kipling's poem "If":

If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;

If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
And yet don't look too good, nor talk too wise:

If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to broken,
And stoop and build 'em up with wornout tools:

Kipling finishes with by the statement

"..then you will be a man my son"

which a century later we may write somewhat differently.

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